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THE UNIVERSITY OF ALBERTA

A STUDY OF TEACHER PLANNING:
FOCUS ON TEACHERS OF THE GIFTED

BY

TERRANCE EDWARD GERLING

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF EDUCATION

DEPARTMENT OF ELEMENTARY EDUCATION

EDMONTON, ALBERTA
SPRING, 1988

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ISBN 0-315-42929-1

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Focus on Teachers of the Gifted

DEGREE: Master of Education

YEAR THIS DEGREE GRANTED: Spring, 1988

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "A Study of Teacher Planning: Focus on Teachers of the Gifted", submitted by Terrance Edward Gerling in partial fulfillment of the requirements for the degree of Master of Education in Elementary Education.

Jean H. Young
Supervisor

DeWilde

Date: April 6, 1988

DEDICATION

To my dear wife, Heather, who stood faithfully by me while I pursued this dream, and was there to lean on when the dream occasionally faltered;

To my daughters, Sara, Abby, and Micala, for their unconditional love;

And to God, through Whom all things are possible.

ABSTRACT

The primary purpose of this exploratory study was to compare the preactive curriculum planning of teachers of the gifted/talented with that of teachers in the regular program. Underlying the study was the assumption that the preactive planning of teachers of the gifted/talented would be based on the "special needs" or abilities demonstrated by gifted/talented children. It was further assumed that influences on the preactive planning of the two groups of teachers would differ in important ways.

Previous research provided a great deal of information on the curriculum planning of teachers in the regular program, although much of it was becoming somewhat outdated. No studies were found dealing specifically with the curriculum planning of teachers of the gifted/talented. A need was discerned, therefore, to address these gaps in the research.

A total of thirteen teachers participated in the study. Seven were teachers of the gifted/talented, while the remaining six were teachers in the regular program. All were employed in four schools in a large urban jurisdiction in Alberta, Canada.

The data for the study were gathered by means of personal interviews conducted by the researcher and a researcher-constructed teacher opinionnaire/rating scale. Participants were asked to contribute data with regard to their general perceptions of curriculum planning, the planning models they routinely employed, and the influences bearing on their curriculum decision making.

A major conclusion drawn from the study is that teachers' curriculum planning is highly idiosyncratic. Nevertheless, differences were found in the curriculum planning of the two groups of teachers. In particular, teachers of the gifted/talented demonstrated a strong correspondence between the motives and approaches that guided their planning behaviors and some of the major emphases in education for the gifted/talented. For example, a realignment in the traditional roles of teacher and student in the gifted/talented program was evident. Teachers tended to be more facilitative of student learning and less overtly orchestrative than their counterparts in the regular program. Paralleling this orientation of teachers of the gifted/talented was a disposition towards taking into account the unique abilities, talents, personalities, needs, and interests of their students when planning.

ACKNOWLEDGEMENTS

A research project such as this could not have been undertaken or brought to a successful conclusion without the assistance and support of many individuals. The author wishes to acknowledge and express appreciation for the contributions of these people.

To my supervisor, Dr. Jean H. Young, my sincere appreciation for all the time and expertise given so freely throughout the course of the study. I am particularly indebted to her for the insights she brought to bear on my research, for the many ways in which she challenged my thinking, and for the high standands that were maintained at all times.

To Dr. Carolyn Yewchuk, for awakening and nurturing in me a keen interest in education for the gifted/talented, for her interest and support at every stage of the research, and for her thoughtful contributions to my study as a member of my examination committee.

To Dr. Warren Wilde, for serving on my examination committee and for the encouraging comments and helpful suggestions made. His suggestions, in particular, enhanced my study in meaningful ways.

Appreciation is extended to the thirteen teachers who participated in the main study, as well as those who took part in the pilot study. For their time and for their dedication, I am truly grateful.

Thank you, also, to my children, Sara, Abby, and Micala, who patiently bore the changes and demands that touched their young lives.

And finally, a special thank you is reserved for my beloved wife and companion, Heather, for her inspiration and encouragement throughout the two years of the Master of Education program. Her unwavering faith in my abilities and her deep commitment to our relationship gave me the courage to persevere.

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CHAPTER I

INTRODUCTION

The process of teacher planning has been the focus of a solid body of research, most of which has been undertaken since 1976. This research is largely premised on the assumption that "...teacher behavior is substantially influenced and even determined by teachers' thought processes" (Clark & Peterson, 1986, p.255). In other words, what teachers do is based on what teachers think. One of the major areas of teacher behavior (what teachers do) is the task of planning in the domain of curriculum.

A statement from the National Conference on Studies in Teaching (National Institute of Education, 1975) asserted the importance of describing the thinking of teachers in the domain of curriculum planning as a means to a more complete understanding of teaching itself.

> "It is obvious that what teachers do is directed in no small measure by what they think. Moreover, it will be necessary for any innovations in the context, practices, and technology of teaching to be mediated through the minds and motives of teachers. If...teaching is done and, in all likelihood, will continue to be done by human teachers, the question of the relationships between thought and action becomes crucial." (p.1)

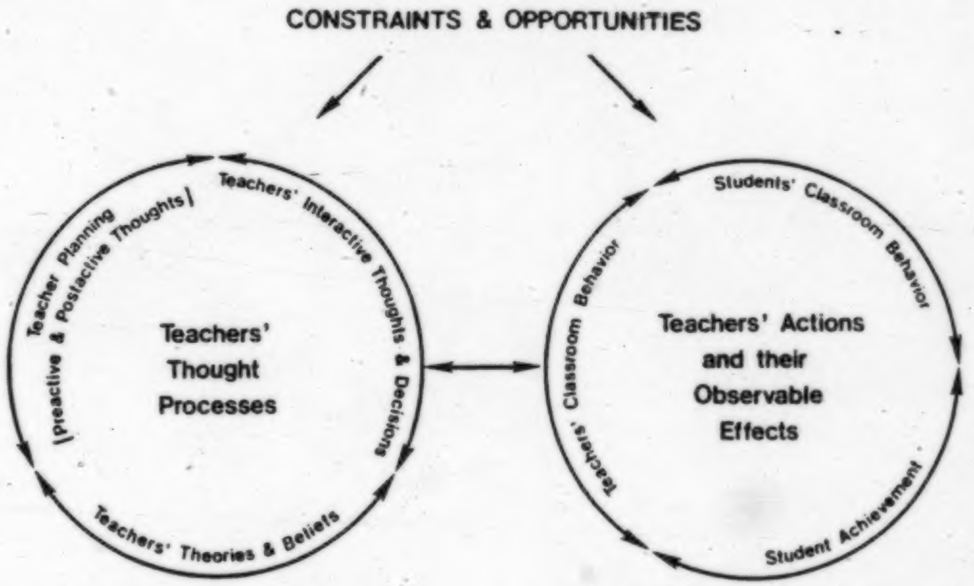
Background and Need for the Study

In an effort to increase our understanding of the complexities of teaching, Clark and Peterson (1986) have developed an heuristic model of teacher thought and action which shows how and why the process of teaching looks and works as it does. The various phenomena of the teaching process have been visually organized and the inter-relatedness of each component is illustrated (see Figure 1).

This model depicts two domains that are involved in the process of teaching. These domains are the teachers' thought processes, which are essentially internal and not observable, and teachers' actions and their observable effects, which are more easily researched and measured. The action domain is where classroom teaching actually takes place, but is beyond the scope of this present study.

Within the domain of teachers' thought processes, three categories have been delineated, reflecting the conceptualizations of the researchers in this domain. These categories follow from Jackson's (1968) distinction between the preactive, interactive, and postactive phases of teaching, distinctions which are based on the hypothetical notion that the kind of thinking done by teachers varies qualitatively with the phase of teaching being conducted. Clark and Peterson (1986) have reconceptualized these distinctions by discriminating between the thought processes engaged in preactively or postactively as the first category and those conducted interactively as the second category. Preactive and postactive thinking have been subsumed under the category of "teacher planning" which thus refers to the thought processes that

Figure 1. A model of teacher thought and action


CONSTRAINTS & OPPORTUNITIES
Teacher Planning
(Preactive & Postactive Thoughts)
Teachers' Interactive Thoughts & Decisions
Teachers' Theories & Beliefs
Teachers' Thought Processes
Teachers' Classroom Behavior
Students' Classroom Behavior
Student Achievement
Teachers' Actions and their Observable Effects

teachers engage in prior to classroom interaction as well as the reflecting that ensues after classroom interaction has taken place in order to plan for future interactions.

The third category, teachers' theories and beliefs, represents the tremendous store of knowledge, gained academically and experientially, which teachers possess and which affects both their planning and their interactive thinking and decision making.

A complete understanding of the complexities of the teaching process is not possible without an appreciation for the constraints and opportunities that impinge on the process of teaching, on the teachers themselves and, very likely, on their thought processes as well.

> "Teachers' actions are often constrained by the physical setting or by external influences such as the school, the principal, the community, or the curriculum. Conversely, teachers may be able to behave in a certain way simply because they are given a rare opportunity to do so. Teachers' thought processes may be similarly constrained. For example, teachers may have less flexibility in their planning or perceive that they have less flexibility in their planning because certain curriculum decisions have been made already by the school district or by the principal. Alternatively, other principals may give teachers more flexibility and opportunity to engage in planning and decision making." (Clark and Peterson, 1986, p.258)

Beyond the need to understand the relationships between teachers' thoughts and actions, it is also useful to predict, and perhaps even influence, what teachers will do in the face of complex and oftentimes demanding teaching-learning situations. It thus becomes necessary for researchers to explore the processes by which teachers perceive and define their professional responsibilities and situations and, moving to the logical next stage, how they respond to them. There can be no doubt that teachers operate within a conglomeration of personalities, theoretical and practical considerations, personal constructs, and a myriad of on-the-spot decisions and judgments through which they must wade and somehow bring into some rational order or arrangement. The thinking processes by which this is achieved constitute a critical area for research on teaching.

Numerous research studies have been conducted with this focus (e.g., Clark and Elmore, 1979, 1981; McLeod, 1981; Morine-Dershimer, 1977, 1979; Yinger, 1978). However, the need to broaden and deepen our understanding of the process of teaching still exists. This present study focuses on certain of the components that make up the process of teaching, specifically, teacher planning (preactive thoughts), teachers' theories and beliefs, the constraints and opportunities affecting teachers' thought processes, and the resultant curriculum plan which, this researcher contends, is the physical link between thought and action represented by the double-headed arrow in the center of Clark and Peterson's model.

This model of teacher thought and action provides a useful frame of reference for the process of teaching as it pertains to all teachers generally. It could also be used to explore the differences that may exist among various categories of teachers operating within this general framework. Is it not possible, for example, that the thought processes of teachers employed in vocational streams might differ from teachers in academic streams? Or that the thought processes of elementary school teachers might differ from secondary school teachers? There might also be profound differences between the thought processes of teachers in regular programs and those offering programs of instruction for any one of a myriad of "special needs" groups of students, simply by virtue of the very needs which set the students apart in the first place.

This hypothetical stance suggests any number of instructional contexts around which a study of teacher planning could be conducted. This study, however, will be limited to an examination of the curriculum planning of teachers functioning in the regular program at the elementary level and will compare it with the curriculum planning of teachers offering a program for one special needs group, the gifted/talented, at the same level.

Purpose of the Study

Given the intentions and aspirations outlined in the previous section, three purposes have been identified for this study.

(1) to survey the relevant literature concerned with the preactive planning strategies of teachers in the regular elementary program engaged in curriculum development at the classroom level, identifying the model(s) employed by them and the influences bearing on their curricular decision making;

(2) to discern, from the literature on the subject. whether or

not the learning characteristics of the gifted/talented child constitute special needs which must be addressed in a qualitatively different program;

(3) to compare the curriculum planning of teachers in the regular program and teachers in a program for the gifted/talented. Four research questions will guide the inquiry.

(a) What are the general perceptions of teachers concerning certain dimensions of curriculum planning, specifically, attitudes toward curriculum planning, types of planning done, type(s) of planning preferred, indicators of effective planning, personal reasons for planning, and preparation for curriculum planning through teacher education?

(b) What model(s) of curriculum planning do teachers routinely employ?

(c) What factors influence the curriculum planning and decision making of teachers and how is this impact experienced?

(d) Which of these factors exert a predominant influence on teachers' curriculum planning?

The second purpose supplies the justification for distinguishing between these two groups of teachers, seeking to establish that they are, in fact, distinct categories of teachers insofar as they think and plan for different kinds of students. It may be that the literature supports the notion that gifted/talented children are a distinct group of students on the basis of "special needs" or abilities. If this is so, then it may be possible to substantiate that the teachers accounting for these needs and abilities in their planning may approach that planning in unique ways and from unique perspectives, with different constraints and opportunities affecting their thoughts and actions.

Assumptions

A number of assumptions underly this study. First, it was assumed that it is possible to isolate teachers' preactive thoughts from the postactive thinking to which it is commonly linked. Whether this assumption was true or not, it was necessary to effect this isolation because of the short time involved in the collection of the data; respondents would not have the opportunity to translate their preactive planning into interactive teaching in order to allow their postactive thinking to take effect and mold subsequent planning.

Secondly, it was assumed that if the literature verified that gifted/talented children were a "special needs" group distinct from the majority of "regular" students, then the planning of teachers of this special group would also be distinct from the planning of teachers in the regular programs. This tied in very closely with the second purpose established for the study. It was also hoped that the data collected in the course of the study would further substantiate this assumption.

Thirdly, it was assumed that the methodology chosen to collect data from the respondents was valid for the purposes of this study. The use of think aloud techniques and stimulated recollection in the context of the personal interview are dependent on the accurate self-reportings of the respondents and may, therefore, be open to question.

Definition of Terms

The following definitions have been included as they relate to the selection of the sample and to some of the procedures which will be used in data collection.

Academic Challenge Program (ACP)

A program implemented in 1984 by the Edmonton Public School Board to provide a challenging academic program to students with high intellectual ability and academic achievement in elementary and junior high schools (Tessari & Mosychuk, 1986).

Gifted/Talented

A designation applied to approximately 2% of the student population in the Edmonton Public School System who fit the criteria adopted by that jurisdiction as stated below.

Gifted and talented students are those who by virtue of outstanding abilities are capable of exceptional performance. These are students who require differentiated provisions and/or programs beyond the regular school program.

Students capable of exceptional performance include those with demonstrated achievement and/or ability in one or more of the following areas:

(a) general intellectual ability

(b) specific academic aptitude

(c) creative or productive thinking

(d) visual and performing arts

(e) psychomotor ability

(Tessari & Mosychuk, 1986, p.2).

Preactive Phase

The preactive phase of teaching is that part of the teaching process which involves the physical and mental preparations necessary for the interactive behaviors of teaching to be conducted (Jackson, 1968). Often there are written and/or mental notes made which will facilitate this interaction (McCutcheon, 1980; Morine-Dershimer, 1979).

Teacher (curriculum) planning

A set of basic psychological processes in which a person visualizes the future, inventories means and ends, and constructs a framework to guide his or her future action (Clark & Peterson, 1986, p. 260).

Thinking Aloud

A method which consists of having a teacher verbalize all of his or her thoughts while engaged in a task such as planning a lesson or making judgments about curriculum materials (Clark and Peterson, 1986). The teacher's verbalizations are recorded, usually on audiotape, and later transcribed to create typewritten protocols. The protocols are then subjected to various kinds of coding systems (almost always created by the researcher) to produce descriptions of the content of the teacher thinking and of the sequences of cognitive processes that teachers follow while planning, making decisions, and teaching (p. 259).

Design of the Study

This section briefly describes the design of the study from its inception. A more detailed description is given in Chapter III.

The researcher conducted an extensive review of the literature on teacher planning and on the learning characteristics of gifted/talented children in order to establish the parameters of what is already known in those areas. The review was used to identify possible points of comparison between the curriculum planning of teachers in the regular program and that of teachers of the gifted/talented and to establish a degree of justification for discriminating between the two groups of teachers on the basis of the kinds of students for whom they planned.

Having done that, the researcher visited one school in the Edmonton area which had been designated as a district centre school in the Academic Challenge Program (ACP) offered by the Edmonton Public School Board. This enabled the researcher to become familiar with the ACP and also to develop from an outsider's perspective a sense of what constitutes "giftedness." The visitation also served to give the researcher experience in initiating and developing rapport with teachers of the gifted. It was also hoped that such contact would contribute to the refinement of the content contained in the formal interviews.

On the basis of the literature reviews and the school visitation, an interview guide and a teacher opinionnaire/rating scale were devised. A pilot study was conducted prior to the actual study itself to determine the validity and reliability of the interview instrument and to establish interviewing and recording procedures.

A sample was selected, consisting of seven teachers of the gifted participating in the Academic Challenge Program in four Edmonton schools and six teachers in the regular program drawn from the same four schools. Insofar as it was possible, the teachers in the regular program were matched with teachers in the Academic Challenge Program on the basis of grade level placement and years of teaching experience.

Teachers in both groups were asked to contribute data on the following:

1) certain general perceptions of curriculum planning;
2) the curriculum planning model they tended to follow;
3) the various influences on their planning; and
4) the prominence of certain influences over others as curriculum decisions are made.

These data were obtained through structured interviews conducted in the four schools using think aloud and stimulated recollection techniques. In the course of the interview, teachers had an opportunity to relate to a hypothetical planning situation (the task of planning a unit on ecology) through which they were able to describe such things as their starting point in planning, the sequence of steps followed and decisions made, and influences on their planning. The methods of inquiry used here were appropriate to this form of data.

Each of the interviews, lasting from sixty to ninety minutes, was audiotaped and later transcribed to facilitate optimum analysis.

The contents of the transcripts were analyzed in keeping with the purposes of the study. Each question in the interview guide served as an organizer for the statements of all thirteen respondents. Data from each respondent were considered separately. They were then summarized and arranged in categories based on perceived relationships among the responses. All teachers of the gifted/talented were subsequently considered as a group, and any commonalities among them were identified. The same process was followed for all the teachers in the regular program. Finally, the two groups were juxtaposed to facilitate comparison of any common and divergent planning elements existing between them.

Limitations of the Study

The size of the sample, the method of sample selection (particularly for teachers in the regular program) and the short duration of the formal interviews may limit the generalizability of the study.

Teachers may find it difficult to articulate verbally the thought processes involved in planning since, typically, a great deal of planning is conducted mentally (McCutcheon, 1980; Morine-Dershimer, 1977). These conditions may adversely effect the reliability of the data.

It is possible that a discrepancy exists between the typical planning efforts of teachers and the planning statements made by them in the context of data collection for the purposes of research. This distortion from actual practice may be a limiting factor.

Significance of the Study

As an exploratory study into a new dimension of teacher planning, this research will describe the planning strategies of teachers of the gifted/talented, providing a basis for future research on related aspects of the curriculum planning of these teachers. If it should be found that working with gifted learners results in a different approach to curriculum planning by teachers of this particular group, there may be implications for planning by teachers of other special groups as well.

It is conceivable that teacher education and in-servicing may be affected by significant findings of different approaches to curriculum planning employed by different groups of teachers. If teachers of the gifted/talented--and by implication, teachers of other special needs groups--are seen to plan differently, with different considerations in mind, then it is incumbent on the institutions of higher education and on in-servicing agencies to accommodate those differences in course offerings and in the content of those offerings.

A grass-roots understanding of the planning strategies of this as yet untapped group will have implications for curriculum development in the gifted domain. By giving developers of curriculum a better perspective of how teachers approach curriculum planning for the gifted in their own classrooms, positive advances may be made in the quality and utility of future curriculum designs.

Overview of the Study

Chapter I has described the background and purposes for the study, delineating four specific research questions, and has outlined the assumptions, limitations, and significance of the study. Definitions of terms used and the overall design of the study have been provided.

Chapter II presents a review of the relevant literature, tying together two separate topics to suit the purposes expressed in the first chapter. The first topic deals with the literature describing various aspects of curriculum planning by teachers, while the second topic explores the possibility that gifted/talented students are a distinct group with special needs which must be addressed in a qualitatively different program. This may have implications for teacher planning.

Chapter III outlines the design of the study. The instrumentation used to conduct the study is described, as is the participating sample. The procedures used to collect the data and analyze it are presented.

Chapter IV presents in tabular and written form the findings related to the research questions contained in the third purpose underlying the study.

Chapter V provides a summary and conclusions for the study, and implications for curriculum planning by teachers. Recommendations for further study are suggested.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter establishes a conceptual framework for the study through an examination of the relevant literature pertaining to two topics: curriculum planning by teachers and the learning characteristics of gifted/talented children. The review of the literature is divided into two sections based on these topics. It is important to note that the majority of the research in this area was conducted within the context of the regular program at the elementary level. No studies were found which dealt specifically with teacher planning for the gifted and talented.

The Literature on Teacher Planning

This portion of the review of the literature will be organized into five sections: (a) the nature of planning; (b) types and functions of planning; (c) models that describe teacher planning; (d) influences on teacher planning; and (e) the characteristics of curriculum plans.

The Nature of Planning

Jackson (1968) conceived of a perspective on planning that distinguished it from other cognitive processes in which teachers engage, identifying the "preactive phase" of teaching. A better understanding of this hidden phase, he contended, would serve to illuminate the visible outgrowth of that process, the overt, or interactive, behaviors of the classroom practitioner.

Planning for instruction followed the traditional model proposed by Tyler (1950), and modified by Taba (1962) and by Popham and Baker (1970). This model, essentially linear in design, prescribed a four-step procedure involving the specification of objectives, the selection of learning activities, the organization of learning activities, and evaluation. Much research, conducted during the 1970s, has provided convincing evidence that teachers do not necessarily plan using this objectives-first, linear model (e.g., Clark & Yinger, 1979; Peterson, Marx, & Clark, 1978; Taylor, 1970; Zahorik, 1975)

Having established what teachers were not doing, researchers began to investigate the realities of classroom planning, attempting to ascertain what teachers were doing. They focused on the cognitive structures that teachers were apparently employing in all aspects of decision making. The underlying assumption was that teacher actions were determined by teacher thinking and by a variety of other social, psychological, and ecological constraints and opportunities that were seen to be germane to that thinking (e.g., Clark & Yinger, 1980; Mintz, 1979; Smith, 1977).

Types and Functions of Planning

Numerous studies have been conducted on the various types of planning teachers engage in and the functions these plans perform.

Yinger (1978) and Clark and Yinger (1979) enumerated eight different types of planning that occur over the school year: daily, weekly, term, yearly, short-term, long-term, lesson and unit planning. From this it is suggested that teachers expend significant amounts of time and energy on structuring, organizing for, and managing limited classroom instructional time. In terms of importance to teachers, unit planning was cited most often, followed by weekly and daily planning. Planning was seen by the majority of teachers to function as a means of meeting the planners' psychological need for security and a sense of direction, of preparing the teacher cognitively and instrumentally for instruction, and of guiding the interactive processes of instruction. Yinger concluded that teachers' use of routines served to simplify the complexities of organization and time management for both students and teachers.

McCutcheon (1980) reported that teachers perceive long-range planning to be counterproductive because of the unpredictable changes and interruptions that invariably occur in the course of instruction. She also pointed out that detailed lesson planning, considered by teachers to be of least importance in planning, occurred in response to administrative demand and the immediate needs of substitute teachers, and otherwise was usually done mentally rather than on paper.

This finding is supported by other studies (Morine-Dershimer, 1977, 1979; Smith & Sendelbach, 1979, cited by Clark & Peterson, 1986) which indicate that teachers formed a "mental image" of the plan which was then recalled and enacted in the course of instruction. Overt planning took the form of an outline or list of topics to jog the memory of the teacher during the flow of activity.

The transformation and/or modification of extra-classroom curriculum to suit the peculiar circumstances of each teaching-learning situation is obviously the primary function of teacher planning. Clark and Elmore (1981) observed that planning was used to adapt the curriculum to fit teachers' knowledge and priorities as well as the unique classroom situation, allowed the teacher to learn the structure and content of new curricula, and permitted the framing of a practical schedule for instruction. A synthesis of the teachers' own previous experiences and the specific curriculum materials enabled them to assume a sense of ownership and control over the content to be taught (Ben-Peretz, 1975).

Smith and Sendelbach (1979) discovered that teachers depend heavily on the published teacher's guides that accompany curriculum packages. While planning, teachers constructed a mental picture of the unit of study, its component activities, and probable student responses. In the course of instruction this mental picture was constantly referred to and enacted as conceived.

Models that Describe Teacher Planning

Most teachers are trained to plan curriculum using Tyler's linear model as described in an earlier section. The discrepancy between this prescriptive model and actual planning at the practitioner level has been noted. Shavelson and Stern (1981) attribute this discrepancy to the need for teachers to "...maintain the flow of activity during a lesson or face behavioral management problems" (p. 477). In short, where theoretical prescription does not closely approximate the demands of classroom instruction, teachers respond to the immediate rather than the remote.

Research on teacher planning has identified the "task" (Doyle, 1980, cited by Shavelson & Stern, 1981) as the basic instructional unit of planning (Clark & Yinger, 1979; Peterson et al., 1978; Smith & Sendelbach, 1979; Yinger, 1978; Zahorik, 1975). Shavelson and Stern (1981) describe the task as being composed of several elements: content, what is to be taught; materials, those things that children can observe and/or manipulate; activity, what the teacher and learners will be doing in the course of instruction; goals, the general learning or affective aims of the teacher; the needs, abilities and interests of the student; and, finally, the social cultural context of instruction, the sense of "groupness." While it is not known in what order these elements are considered, or what compromises have to be made between elements, it is assumed by these authors that the dictates of specific tasks and the proclivities of individual teachers would be reflected.

Research examining the planning processes in use by teachers tended to highlight one or more of these elements in their findings. Peterson et al. (1978) found that teachers spent the largest proportion of their planning time on the content to be taught, and then on the instructional processes that would be incorporated. Least emphasis was placed on objectives. This finding is substantiated by several other studies (Taylor, 1970; Clark & Yinger, 1979). Zahorik (1975) reported that content decisions were often made first in planning, but that the decision made most frequently focused on pupil activities.

Yinger (1978) shed light on the element of activities in his formulation of a three-stage cyclical planning model including a problem-finding phase wherein the teacher's conception of the worth of an activity is created based on an interaction of content, goals, knowledge and experience, a problem-formulation and solution phase in which the activity is elaborated upon, and an implementation, evaluation, and routinization phase during which time the activity becomes internalized as part of the teacher's repertoire of knowledge and experience and subsequent recall in future planning deliberations.

An important contribution of this study to research on teacher planning was the introduction of a cyclical model to replace the traditional linear model, enabling planning to be conceptualized as a process influenced by prior planning and teaching experiences and influencing subsequent efforts. Further investigations of the Yinger model lend additional support to this tendency of teachers to mentally visualize, elaborate, and modify their plans (Clark & Yinger, 1979; Yinger & Clark, 1982, 1983).

Borko (1978, cited by Shavelson & Stern, 1981) contends that teachers do, in fact, place emphasis on objectives and goals as part of the planning process (in a laboratory context, at least), while most naturalistic research conducted in the classroom insists otherwise. Morine-Dershimer (1978-79) offers a possible resolution of this disagreement by suggesting that objectives are part of teachers' mental image, though not a part of their verbal reports of their planning in naturalistic settings. McLeod (1981) described objectives in terms of intended learning outcomes which, though perhaps not the starting point in the planning process, are definitely considered at some point in the process. She found that the largest percentage of intended learning outcomes was identified during the interactive phase, followed by the preactive, and finally, the postactive phases of the teaching process. Most of the intended learning outcomes were cognitive, predominating during the preactive and postactive phases, while social-affective outcomes were identified primarily during interactive teaching.

Taylor (1970) noted that students' needs, interests and abilities figured prominently in teachers' course planning, followed, in order of importance, by subject matter, goals, and teaching methods. Morine-Dershimer (1978-79) determined that teachers' concerns about students tended to cluster early in the planning year when "getting to know the students" is fundamental to effective planning.

Decisions regarding the social cultural--that is, student management--context of instruction (Janesick, 1978; Shavelson & Borko, 1979) tend to be made at the outset of the planning year, and subsequent decisions are based on these _a priori_ givens which, in studies covering other planning periods, may not receive emphasis. This lack of emphasis may, consequently, seem to indicate a _lack_ of consideration of this element by teachers when, in fact, such consideration has simply become an integral, though unstated, part of the teacher's planning routine. This may be equally true of the secondary importance that such elements as student characteristics and goals appear to take in certain planning situations.

Subsumed into a discussion of teacher planning models is the notion of "planning styles" examined initially by Clark and Yinger (1979), and further explored in subsequent studies (Sardo, 1982; Favor-Lydecker, 1981, cited by Clark & Peterson, 1986). Clark and Yinger identified two types of planning: "incremental planning," where teachers employed a series of short planning steps, relying heavily on day-to-day information from the classroom, and "comprehensive planning," in which a broader framework for future action was developed. Sardo found that differences in planning styles depended on the amount of teaching experience possessed by teachers. Less experienced teachers tended to apply the incremental approach, in a more Tylerian fashion, than did the more experienced teachers. Favor-Lydecker described five planning styles identified in an assessment of a number of unit plans: teacher-student cooperative planning, brainstorming, list and sequence planning, culminating event in sequence planning (where a sequence of activities builds toward a culminating event), and culminating event as goal statement planning (where a culminating event determines the purpose for a sequence of activities).

A number of other models have been proposed to account for teachers' planning decisions (Borko, 1978; Russo, 1978, cited by Shavelson & Stern, 1981) suggesting that planning strategies are as varied as the teachers who use them.

Influences on Teacher Planning

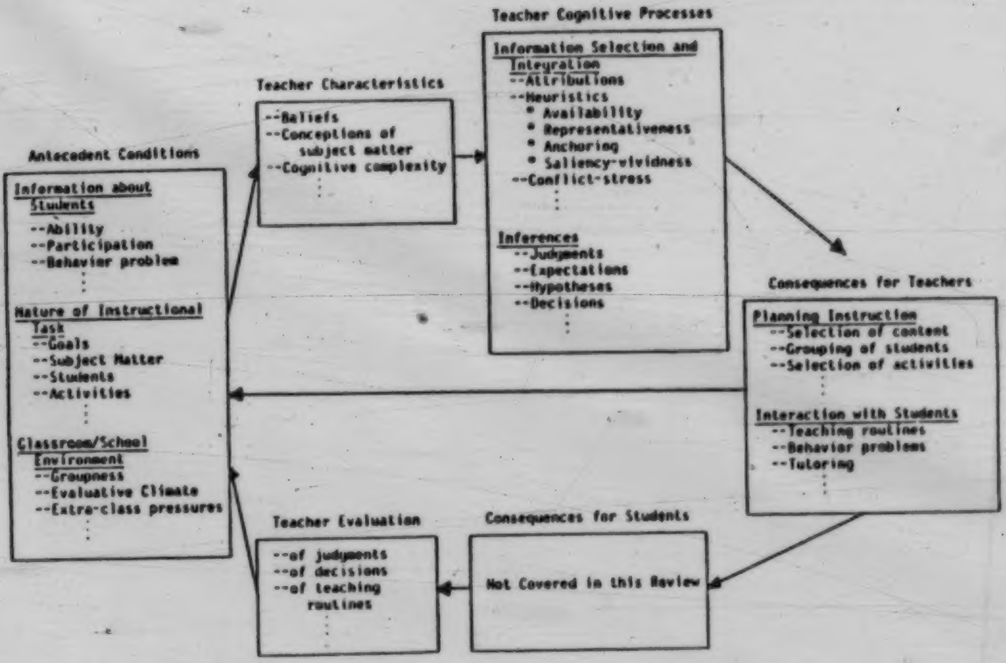
Shavelson and Stern (1981) have formulated a conceptual model of teacher planning intended to show "...how teachers integrate information about students, the subject matter, and the classroom and school environment in order to reach a judgment or decision on which their behavior is based" (p. 460). This model is reproduced in Figure 2.

Shavelson and Stern concluded that, in processing information, people are limited in their ability to process everything contained in their environment, and that they tend to process information sequentially rather than simultaneously.

> As a consequence of these information processing limitations, people selectively perceive and interpret portions of available information with respect to their goals, and construct a simplified model of reality. Using certain heuristics, attributions and other psychological mechanisms, people then make judgments and decisions and carry them out on the basis of their psychological model of reality. In order to understand the behavior of teachers, then, it is essential to know (a) their goals, (b) the nature of the task environment confronting them, (c) their information-processing capabilities, and (d) the relationship between these elements. (p. 461)

Influences on teacher planning (individually researched in numerous studies cited by Shavelson & Stern, 1981) include such varied factors as antecedent conditions (information about students, the

Figure 2. Overview of the domain of research on teachers' judgments, decisions and behavior


Teacher Cognitive Processes
Information Selection and Integration
--Attributions
--Heuristics
• Availability
• Representativeness
• Anchoring
• Saliency-vividness
--Conflict-stress
Inferences
--Judgments
--Expectations
--Hypotheses
--Decisions
Teacher Characteristics
--Beliefs
--Conceptions of subject matter
--Cognitive complexity
Antecedent Conditions
Information about Students
--Ability
--Participation
--Behavior problem
Nature of Instructional Task
--Goals
--Subject Matter
--Students
--Activities
Classroom/School Environment
--Groupness
--Evaluative Climate
--Extra-class pressures
Consequences for Teachers
Planning Instruction
--Selection of content
--Grouping of students
--Selection of activities
Interaction with Students
--Teaching routines
--Behavior problems
--Tutoring
Teacher Evaluation
--of judgments
--of decisions
--of teaching routines
Consequences for Students
Not Covered in this Review

nature of the instructional task, and the classroom/school environment), teacher characteristics (beliefs about education and teaching, conceptions of subject matter, levels of cognitive complexity), teachers' cognitive processes involved in selecting and integrating information and making inferential statements (heuristics, attributions, conflict-stress), and teacher self-evaluation.

Clark and Yinger (1980) present a similar set of categories of influences on teacher planning as part of their model for research on teacher planning for instruction. Their categories include teacher characteristics (experience, personality, repertoire of teaching skills and strategies, teacher implicit theories), student characteristics (grade level, class size, cognitive readiness, social-emotional readiness), curriculum characteristics (subject matter, materials), and environmental factors (classroom organization, school schedule, time available, administrative regulations, accountability system).

Schwille and Others (1979) summarized a cross-section of research studies that expands even further on the already extensive list of influences on teacher planning noted above. The Content Determinants research project considered the influence of parents, peers, administrators, tests, textbooks, and established objectives in teacher decision making. Other studies explored the influence of compatibility, costs, obligation, urban vs. rural school districts, centralized vs. decentralized programs, teacher isolation, and teacher change in assignment as possible factors in teacher decisions. Bredo (1980) further explored certain of these normative and ecological influences, establishing certain school-level and classroom-level variables to be of greater impact on teacher decision making than others. For example, at the school level, the most consistent predictor of a teacher's approach was the normative climate created by peers especially in areas of key interdependence among those peers; administrators, on the other hand, were seen to have little influence over instructional emphases. At the classroom level, a more student-centered approach was noted when such variables as the presence of aides or volunteers, extremes of heterogeneity, or large numbers of students were involved.

Munby (1982) questions the findings of studies on teacher beliefs and decision making (Russo, 1978; Duffy, 1977) which give little, or no, credence to the influence of teacher beliefs on instructional decision making. Bussis, Chittenden, and Amarel (1976), however, conducted an extensive survey of teachers' belief structures and found a great diversity of constructs operating in the minds of teachers which directly affect planning and decision making.

Similar findings were reported by Toomey (1977). He identified two types of planners whose belief structure characterized them as being either student-centered or teacher-oriented. Teachers of the former persuasion tended to draw heavily on their students' needs, interests, and abilities in setting learning tasks, and placed much less emphasis on pre-set objectives than did those who were more teacher-oriented. Selection of content and learning materials was also determined by the teachers' view of its inherent worth or of its relevance to the student, in the students' own estimation. The teacher-oriented approach permitted content-materials to be chosen on the basis of its providing specific information, as determined by the teachers.

Pylypiw (1974) reported that "...the force of the teacher's personal background and value system is the most powerful functioning element operating when decisions are made regarding the selection of an area of concentration" (p. 146). Secondary influences included the availability of resources, the recommendations of the provincial or local guide, the needs and interests of students, and the directions given by school administrators, in that order. However, once the starting point had been established, the needs and interests of the students became the most influential factor in the identification of specific learnings, followed by the personal background and values of the teacher, resources, the provincial guide, internal school organization, and other teachers. People furthest removed from the classroom situation, such as principals, system administrators, parents, and the friends and relatives of the teacher, ranked last.

Jeffares (1973) discussed the influences on teacher curricular decision making in terms of four broad categories: learner characteristics, teacher characteristics, conditions within the school, and curriculum. Influences on teacher curricular decisions within the four categories were rank ordered by teachers as follows: instructional resources, curriculum elements, student characteristics, teacher characteristics, instructional procedures, and evaluation. While the availability of appropriate instructional resources appeared to influence teachers to the greatest extent initially, other elements were seen to take precedence in subsequent stages of planning. The teachers' view of the planning process was shown to be directly related to their individual belief systems.

According to Janesick (1978), a teacher's perspective, or belief system, serves as the basis for the actions he or she constructs. In an ethnographic description of one teacher's perspective, which was characterized by his concern for creating and maintaining a stable and cohesive group, Janesick reported that the teacher made plans and modelled and emphasized behaviors that contributed to the "groupness" of the class.

Curriculum Plans

The end product of teacher planning, the curriculum plan, is very closely related to the models of teacher planning and the influences on teacher planning. When the individual teacher, the planning styles or models, and the various influences interact in the planning process, an incredible diversity of products results. Toomey (1977) alluded to this in his declaration that planning is an individual exercise. Similarly, Peterson et al. (1978) noted that teachers vary widely in the nature of their planning statements. These differences were related to the teachers' cognitive processing styles and aptitudes.

Furthermore, it must be stated at the outset that whatever model(s) of planning may be utilized, and whatever influences impinge on planning, much, if not most, of the decisions that are finally made do not show up in the final written curriculum plan. Much of this preactive decision making becomes part of the "mental image" referred to above (Morine-Dershimer, 1977, 1979; Smith & Sendelbach, 1979, cited by Clark & Peterson, 1986).

Morine (1977) studied the written mathematics and reading plans of elementary teachers to determine the degree of specificity of the plans, their general format, evidence of goal statements, attention to students' background and preparation, identification of evaluation procedures, and indications of alternative procedures. She found that the teachers were fairly specific in detailing their intentions for instruction and tended to use an outline format, listing possible examples or questions that might be used in a lesson. However, it was noted by teachers that such detailing was for the benefit of the researchers; for themselves, a "mental picture" sufficed. The plans showed little, or no, evidence of attention to goals, students' needs and interests, evaluation, or alternatives. In similar studies, Morine-Dershimer and Vallance (1976) and Clark and Yinger (1979) reported that many of the preactive decisions of teachers are not mentioned in the written plans.

McCutcheon (1980) makes mention of teachers' plans as they appeared in the planbooks. These plans were described as lists of activities, page numbers in the textbook or teacher's manual, and perhaps a few words about concepts to be taught--what McCutcheon refers to as the "grocery-store" list. Plans for specific subjects (reading and mathematics) relied heavily on suggestions from teachers' manuals. Where appropriate, the interests of the teachers themselves were introduced as a component of the plans. Due to time constraints, discovery learning was not included in most science and social studies lessons.

Activities were identified as the basic structural units of planning in another study of one elementary teacher by Yinger (1980). Planning for instructional activities by this teacher revolved around seven major features: location, structure and sequence, duration, participants, acceptable student behavior, teacher's instructional moves, and content and materials. For each instructional activity the teacher made planning decisions affecting these features, many of which were present in the written plans.

A second distinctive characteristic of the teacher's planning was the use of routines which, according to Yinger, were used to establish and regulate activities and to simplify planning. Four kinds of routines were identified: activity routines, instructional routines, management routines, and executive planning routines. Executive planning routines, unlike the others, do not occur during instruction, but are a part of the planning process. Planning routines became evident in the consistent and regular manner in which planning was activated and guided, and depended on the type of planning engaged in. The use of routines was seen to increase the teacher's flexibility and effectiveness by reducing the time and energy expended on planning and carrying out decisions, and also increased the predictability and decreased the complexity of the classroom environment for the students. As a result, less time was spent on procedure and more on content.

In a study focused primarily on unit planning, Clark and Yinger (1979) identified two kinds of plans. Incremental planning was characterized by the development of short-term steps or stages in the unit, implemented in accordance with the ever-changing needs and states of the students. Comprehensive plans consisted of a thoroughly specified framework for action, demonstrating a cognizance of the whole unit of study and its intended progress and outcome. Yinger (1980) described these unit plans as consisting of lists or outlines of activities and content, lists of sequenced activities, and notes in the planbook. In the same study, Yinger summarized the form of other types of planning (yearly, term, weekly, and daily) as general outlines, elaborations of outlines and, as the planning became more specific, names and times of activities and notes regarding preparation and arrangement of materials and facilities in the classroom.

Housner and Griffey (1985), in a study of planning by instructors of physical education, reported that teacher plans included two categories of decision making: task/activity decisions (structure and procedure of the activity, time allocation, spatial organization, contingency arrangements), and instructional strategy decisions (management, assessment/feedback, demonstrations, transitions, focusing student attention, verbal instruction, use of equipment, time allocations). They found that differences between experienced and inexperienced teachers in the planning of activities were minimal, but the instructional strategy decisions of experienced teachers for implementing the activities were almost double those of inexperienced teachers. Experienced teachers seemed more concerned with managing activities during instruction as evidenced by their high levels of preactive planning.

Summary

From the above review of the literature, the following summarizing statements can be made.

(1) The preactive stage of planning/decision making is distinct from other stages in the planning process in terms of when it is done and in the types and levels of decisions made during that stage.

(2) Teachers, although trained in the traditional Tylerian linear model, do not, in fact, routinely make use of this model in their formal or informal planning. A number of cyclical models more closely describe the planning processes of practicing teachers.

(3) Teachers engage in a wide variety of types of planning of diverse scope, citing unit planning as being of most importance. Planning tended to serve the psychological, logistical, and practical needs of teachers. It was noted that the primary purpose of the planning process was the translation of curriculum into instruction.

(4) A significant proportion of planning occurs in the form of mental images, or pictures, of the intended flow of the learning. "Mental planning is probably the part of teaching that has the potential for being the most professional activity of teaching, for it gives teachers the opportunity to relate theoretical knowledge to particular cases" (McCutcheon, 1980, p. 8-9).

(5) The task, or activity, composed of numerous interrelated elements (Shavelson & Stern, 1981) is the basic instructional unit of planning. Activities, content, students' needs, objectives, and instructional strategies are all given consideration, although

consensus on priorities or degrees of emphasis is not clear. It would appear that such considerations are a function of the unique planning styles of individual teachers.

(6) There exists a multitude of influences, factors, and elements that bear directly or indirectly on the decision making/planning of teachers. Basically, four major (though perhaps not all-inclusive) categories can be discerned: teacher characteristics, student characteristics, curriculum characteristics, and environmental factors. Certain elements within each category tend to demand more, and consistent, attention than others. The belief structure of teachers, in particular, receives much emphasis in all levels and styles of planning.

(7) The end product of teacher planning/decision making, the curriculum plan, is a direct outgrowth of the varying combinations of the types of planning, the models and/or styles of planning, and the relevant influences all brought together in the person of the classroom teacher. The curriculum plan, for the most part, is the visible product of an invisible process, most of which is inherent, but not stated, in the plan.

The Literature on the Learning Characteristics of Gifted/Talented Children

This section of the review of the literature explored the possibility that gifted learners constitute a distinct grouping by virtue of their special needs which would, in turn, warrant the creation of a gifted/talented program designed to meet those needs. Such a distinction might then serve to qualify teachers of the gifted as a distinct subgroup within the teaching profession who approach and conduct their curriculum planning from a different orientation than their counterparts in the regular program.

Do the Gifted Think and Learn Differently?

An extensive review of the research of the past decade involving 106 comparative studies of gifted and nongifted populations has recently been compiled (Rogers, 1986). Questions of differential cognitive styles, cognitive developmental patterns, cognitive strategy selection, and social and emotional factors associated with the academic setting were discussed.

Research on differential cognitive styles (Dunn & Dunn, 1980; Dunn, Dunn, & Price, 1981; Ricca, 1984; Ristow & Edeburn, 1985; Stewart, 1981) indicated that gifted/talented learners have a learning style preference characterized by "...independence of thought and action leading to a task-oriented persistence and less need for content structure, in addition to a resistance to the potential distractions that responsibility for others and an 'open' classroom setting might include" (Rogers, 1986, p. 20). In the dimension of field independence/dependence--the perceptual ability of the learner to extract specific information from its context for processing--Goodenough and Witkin (1977) concluded that the field independent (gifted) learner tends to use a more active approach, to be more willing to test his/her own conclusions, and to be, in effect, more autonomous. Gifted learners were also perceived to have an internal locus of control; that is, to believe that they are in control of and are responsible for the events occurring in their own lives (Fincham & Barling, 1978; Kanoy, Johnson, & Kanoy, 1980; Milgram & Milgram, 1976). Results of studies on hemispheric specialization and cerebral dominance in the gifted have been contradictory, and more research is called for before definite conclusions can be drawn.

The Piagetian research on cognitive development in gifted learners appears to follow one of two general hypotheses. The "similar sequence" hypothesis states that all learners move through the same stages of cognitive development in the same order, but that the gifted progress more rapidly through each stage, thus reaching the formal operations stage at a much earlier age (Carter & Kontos, 1981; Keating, 1975; Webb, 1974; Weisz & Zigler, 1979). However, not all studies accept this conclusion (e.g., Kuhn, 1976). A second hypothesis about differentiated stage development in the gifted, termed "task variability," suggests that gifted learners excel in the performance of certain tasks within each stage (DeVries, 1974; Shigaki & Wolfe, 1980; Webb, 1974).

In the domain of cognitive strategy selection and use in problem solving tasks, gifted learners to a significantly greater degree process information using higher order "meta-components," such as problem recognition, spontaneous generation and monitoring of solutions, resource allocation, information representation, and preconceptual analysis (e.g., Hagen, 1979; Scruggs & Mastropieri, 1984;

Sternberg, 1981; Turner, 1980; Wilson, 1985; Wong, 1982; Zimmerman, 1981). In assessing the performance processes of problem solving such as encoding, inference, and justification, significant differences were found in the speed and success with which gifted learners executed these processes in analogical thinking (e.g., Sternberg, 1981; Zimmerman, 1981). The gifted were also seen to differ significantly in a third area of problem solving--knowledge acquisition--in their ability to analyze, synthesize, and evaluate newly acquired information (Ward, 1980), and in their decontextualization skills in constructing solutions to new problems requiring transfer of previously learned strategies and content (e.g., Scruggs & Mastropieri, 1984; Sternberg, 1981).

It is important to note that not all of these characteristics are demonstrated by gifted/talented students, nor are they exclusive to that group. They are merely characteristics with which gifted/talented students appear to be more favored. Rogers (1986) maintains that these differences between gifted and non-gifted learners are quantitative rather than qualitative; however, she recognized that substantial quantitative differences tend to produce qualitative differences over time. The differences in thinking and learning ability demonstrated by gifted/talented learners "are probably ones of degree" (p. 31).

Summary

From the review of the literature on the learning characteristics of the gifted and talented, the following statements can be made.

(1) Gifted/talented learners demonstrate learning style preferences that constitute a noteworthy departure from the preferences expressed by learners in the regular program. Being active, autonomous learners and recognizing an inner locus of control with respect to their learning were prominent characteristics of gifted/talented learners.

(2) Piagetian research on the cognitive development of gifted/talented learners suggests that learners either move more quickly through the same series of developmental stages of cognitive development, or they are simply more capable than their chronological peers at each level of development.

(3) Gifted/talented learners tend to be more proficient at manipulating information using higher order "meta-components" with impressive speed and accuracy, and with the ability to transfer both process and content to new learning situations.

(4) It is very likely that the differences between gifted and non-gifted learners are quantitative rather than qualitative differences--without ruling out the qualitative effects possible with extreme quantitative behavior. The differences are ones of degree (Rogers, 1986).

The Use of the Literature Review in This Study

The review of the literature contributed to this study in a number of important ways. Studies on teacher planning were useful in developing the two measuring instruments around which the study revolved, especially in terms of establishing relevant areas for investigation and providing a context for new information supplied by the respondents in the present study. The creation of the Teacher Opinionnaire/Rating Scale owes much of its existence to the earlier studies which uncovered most, if not all, of the items contained in it. This will become more apparent in the relevant sections of Chapter III dealing with instrumentation.

The literature on gifted/talented children was sufficiently conclusive to justify proceeding with the study as it was originally conceived. The researcher's assumption that gifted/talented students constitute a distinct group of students who might therefore require a different program suited to their special needs and abilities was upheld. It followed, then, that the planning of teachers of this special group might also be distinct from the planning of teachers in the regular program. Determining if this was true, and if so, how it manifested itself, provided the impetus for the study.

This review indicated a lack of information concerning the curriculum planning of teachers of the gifted/talented and a need to update what is known about the curriculum planning of teachers in the regular program since much of the information is approaching ten years old. At the present time, it is possible to begin to fill in and/or close the gap that currently exists in our understanding of this important dimension of curriculum and instruction.

CHAPTER III

RESEARCH DESIGN

Chapter III describes the research design employed in this study. The instrumentation, pilot study, study sample, and collection and analysis of data are discussed with specific reference to the third purpose underlying the study. The research design was developed to compare the curriculum planning of teachers in the regular program and teachers in a program for the gifted/talented. Four research questions were formulated to this end.

(a) What are the general perceptions of teachers concerning certain dimensions of curriculum planning, specifically, attitudes toward curriculum planning, types of planning done, type(s) of planning preferred, indicators of effective planning, personal reasons for planning, and preparation for curriculum planning through teacher education?

(b) What model(s) of curriculum planning do teachers routinely employ?

(c) What factors influence the curriculum planning and decision making of teachers and how is this impact experienced?

(d) Which of these factors exert a predominant influence on teachers' curriculum planning?

Instrumentation

The interview guide and an accompanying opinionnaire/rating scale were designed to gather data that would identify teachers' perceptions of curriculum planning, teachers' planning models, and factors influencing teachers' curriculum planning. Both measuring instruments will be described and discussed in the next sections. (See also Appendices B and C).

The Interview Guide

The interview guide was organized into four major parts, three of which were suggested by research already conducted in the area of teacher planning, and a fourth which answered basic personal and professional data needed to compare the two groups in the study sample. The first three parts were sequenced to effect a progression of ideas related to curriculum planning from general considerations of planning to more specific insights into planning. The final part stood by itself.

Part One--General Perceptions of Curriculum Planning--was developed to answer research question 3a. It focused the thinking of the respondents on topics within the broad field of curriculum planning. These topics included teachers' attitudes toward planning, the types of planning in which teachers engage, their personal preferences for certain types of planning, indicators of effective planning, teachers' personal reasons for planning, and preparation for curriculum planning through teacher education.

The purpose of these questions was to orient the thinking of the respondents toward the act of planning in a general sense by discussing some of the broader aspects of the task.

A planning simulation in Part Two--Teachers' Planning Models--was developed to answer research question 3b. It focused the respondents' attention on a specific curriculum planning task. Respondents were asked to describe the procedures they typically followed in planning an original unit of study in a specific subject area.

The unit format was selected because of its prominence in the research on teacher planning (Clark & Yinger, 1979; Peterson et al., 1978; Yinger, 1978; Zahorik, 1975). In at least one such study, it was the stated preference of teachers engaged in curriculum planning (Clark & Yinger, 1979). Further to that, unit planning designates a unit of content for which teachers plan as opposed to a span of time for which planning takes place, such as daily, weekly, short-term, and yearly planning. Planning a unit of content was seen to be a desirable feature for the purposes of this study, since it provided a simpler focus in one subject area for the respondents, whereas planning for an increment of time often involves many subject areas and usually includes both subject related and non-subject related events and decisions.

The context of the planning task was established for the respondents by the researcher and was delineated at the outset. The topic/subject area was assigned by the researcher in order to remove one variable from the teachers' planning models that might otherwise unnecessarily complicate the analysis of the planning process. Ecology was selected as the area of focus because of the likely familiarity of the respondents with the topic, because it ties in very appropriately with the curriculum mandated for Division II by Alberta Education, and because there is a wealth of information available from many sources on the subject or on related aspects of the subject. Consequently, it was felt that the respondents would not be limited in their descriptions by a lack of acquaintance with the content involved.

Respondents were further limited in their descriptions--for the sake of standardizing their responses--by the additional requirements imposed by the researcher to confine their descriptions to the preactive phase of their planning, to closely approximate the style of planning they typically used in their own "real-life" planning, and to develop the unit "from scratch." By imposing these limitations, a high degree of standardization of responses would hopefully be achieved, allowing the actual planning model being described to become more prominently featured.

Part Three--Factors Influencing Curriculum Planning by Teachers--addressed research questions 3c and 3d and capitalized on the line of thought generated by the planning simulation of the previous part of the interview by inviting the respondents to determine the degree of influence certain factors had on their curriculum planning and decision making. The teacher opinionnaire/rating scale was used to stimulate the recall of the respondents concerning pertinent factors in four categories related to the teacher/planner, the students, the curriculum, and the learning environment, as suggested by independent research sources (Clark & Yinger, 1980; Jeffares, 1973; Pylypiw, 1974; Shavelson & Stern, 1981). This measuring instrument will be discussed more fully in the next section of this chapter.

The final part--Personal and Professional Data--solicited information from the respondents as to age, gender, years of teaching experience, years of post-secondary education, and degree of participation in pre-service and in-service professional development activities. The personal and professional data is fully reported in the discussion of the sample found later in this chapter.

The Teacher Opinionnaire/Rating Scale

This measuring instrument was developed to collect data on the factors perceived by teachers to influence their curriculum planning. A total of twenty-five items were included, divided into four major categories of factors (see Appendix C). These were accumulated from a number of research sources specifically designed to investigate the impact of those factors on teacher planning.

Though by no means exhaustive, the twenty-five items represented a cross-section of factors influencing teachers' curriculum planning and included those factors cited most often by teachers participating in the above-mentioned research studies. To avoid the possibility of limiting the respondents to the structured listing, the final item within each category was left open-ended to allow the respondents to add any factor to the list which was particularly relevant to their planning circumstances.

The Teacher Opinionnaire/Rating Scale employed a scale of 1 to 5 (5 being indicative of the greatest influence on the planner) to be applied to each item in the list in a rapid-fire, spontaneous fashion.

The element of spontaneity was seen to be desirable as the most effective means of ensuring authenticity of response; respondents would be less inclined to pause and ponder over the items and possibly alter their responses to fit into some preconceived notion of "the right answer." At the same time, however, respondents were permitted to change their responses if they felt so inclined.

The spontaneous ratings were substantiated by subsequent commentary on the part of the respondents as to where, when, and how these factors influenced their planning.

The Pilot Test

Prior to the formal collection of data, a pilot study was conducted with five elementary teachers in the regular program. The purposes established for the pilot test did not necessitate the inclusion of teachers of the gifted/talented; indeed, because of the limited numbers of teachers in this category available for the actual research, they were deliberately excluded from participation in this phase of the study. This was in no way detrimental to the research process.

The pilot study was designed to achieve the following purposes.

(1) To determine whether the research questions could be answered by using the two data gathering instruments developed for the study;

(2) To identify and overcome any problems which might be encountered with the interview procedure, such as the interpretation of the interview questions, the use of the rating scale, and the technical

operation of the audio equipment;

(3) To determine and adjust the amount of time necessary to conduct the interview;

(4) To develop skill in the role of interviewer.

The purposes of the pilot test were fully achieved. The five participants demonstrated, through their responses, the validity of the instrumentation. The interview guide and the rating scale were deemed valid because the participants consistently interpreted the questions in the same way. Similarly, internal consistency was noted in the responses of each participant throughout their respective interviews confirming the ability of the instruments to elicit the appropriate information.

As a result of the pilot test, the researcher was able to confirm the appropriateness of important elements within the research design and to add refinements to the design that would contribute to a more successful study. For example, the use of the personal interview format as the means to collect data was confirmed, as was the decision to incorporate a high degree of specificity into the Teacher Opinionnaire (Pylypiw, 1974). A suitable introduction to the interview was also formulated, based on the pilot study, to provide the respondents with the necessary background information. This information included a brief autobiographical statement from the researcher, a description of the purposes of the study, criteria for selection of the participants, assurances of anonymity, and the need for candid and complete honesty in the responses.

One major adjustment was made to the interview guide after the pilot test, which amounted to a modification of one of the overall purposes for the research study. After completing the Teacher Opinionnaire/Rating Scale, participants were given an opportunity to expand on their assigned ratings by telling where and when these factors became influential on their planning and how they affected their planning decisions. It became apparent that this commentary, though important, was too involved and too draining mentally and physically for the participants to engage in successfully, and it added excessively to the amount of time required to complete an interview. Consequently, a decision was made to limit the commentary from the respondents to statements of "how" these factors influenced their planning decisions. The time now required to complete the entire interview was fixed at approximately one hour, although the length of the respondents' replies would ultimately be the determining factor.

Sample Selection

The population selected for this study was composed of teachers of the gifted/talented (Academic Challenge Program) and teachers in the regular program employed by the Edmonton Public School Board. The criteria for selection evolved from consideration of the numerical limitations imposed on the study by the teachers of the gifted/talented; that is, there was a finite number of teachers of the gifted/talented who could possibly participate in the study.

Because of these numerical limitations, teachers of the gifted/talented were identified first. The criteria for selecting the respondents from this group were based on their teaching assignment and experience. The sample was limited to those teachers who occupied full-time teaching positions in special classes at the Division II (Grades 4-6) level at four schools located in diverse areas of the city of Edmonton. A minimum of two years of experience working with gifted/talented children was expected. Given the relative newness of the Academic Challenge Program (1984), it was not possible to raise the experience requirement beyond the two-year minimum.

The grade level criterion was used to reduce the effect of the pupil age variable which might influence the curriculum planning process practiced by the teachers. The criteria requiring that teachers occupy full-time teaching assignments with gifted/talented students and that the assignment have extended for a minimum of two years was stipulated by the researcher in order to lend greater credibility both to the expertise of these teachers in working with this special needs group as well as to their planning capabilities. With these criteria, the planning focus of this group would hopefully be oriented exclusively toward the gifted/talented, thereby eliminating, or at least reducing, the difficulties of working with a group having a composite orientation (i.e., a planning orientation directed towards the gifted and the regular program in a "split" assignment or towards the gifted within the regular program in a mainstreaming situation).

Largely because of an already small teacher population in the Academic Challenge Program and because of the number of multi-graded special classes involved in Division II, a total of seven teachers of the gifted/talented met the above criteria. All seven participated in the study.

Seven teachers in the regular program were closely matched to the seven teachers of the gifted/talented on the basis of approximate grade level placement (Division II) and years of teaching experience. Figure 3 shows how the repondents in each group were matched. (Assessing the impact of any demographic variables on planning styles or influences was considered beyond the scope of this study.) To minimize the variables attendant on the schools involved in the study (e.g., socioeconomic level of the school population, size of school, pedagogical slant), teachers in the regular program were selected from the same four schools as the teachers of the gifted/talented.

Due to circumstances beyond the control of the researcher, two of the respondents in the regular program opted out of the study while the interviews were in progress. Because of constraints imposed by the Edmonton Public School Board regarding deadlines for the completion of research in the schools--May, 1987--it was not possible to restore the balance in the sample until the fall of the same year. After interviewing a sixth respondent, it was feared that some planning considerations of teachers might be sufficiently different at the start of the school year as compared to the end, and the validity of the data might be compromised. So as not to introduce too strong a discrepancy into the data from this point of view, the sixth interview was included in the study, but a seventh interview was foregone. The size of the group representing teachers in the regular program was thus limited to six respondents.

Figure 3. Description of the research sample

	Respondent	Gender	Grade Level	Years of Experience	Post-secondary Education (yrs)
Gifted Program	A	F	4-6	11	4+
	B	F	5-6	20	5
	C	F	4	16	4
	D	F	6	15	6
	E	F	4	7	5
	F	F	5	22	6
	G	F	4-6	22	6+
Regular Program	A	M	5	11	4
	B	M	6	19	6
	C	M	5	17	6
	D	F	5	14	4
	E	M	6	8	4
	F	M	4	24	4

N.B. Respondents were matched between the two groups, e.g., A with A, B with B, etc, although not necessarily within the same school. Note that repondent G in the gifted program is unmatched.

All thirteen respondents were contacted by telephone after prior permission to conduct the study in their schools had been obtained from their respective principals. Each was briefly informed of the proposed study and their possible contribution to it. A time and place for conducting the interview was established at that time, if the respondent agreed to participate.

Data Collection

The data for this study were collected during the period May 11 through May 28, 1987. The make-up interview with the sixth respondent in the regular program was conducted on September 21, 1987. Each interview took approximately one hour. All teachers were interviewed in the familiarity of their own classrooms or in a quiet room in the school where interruptions would be minimal. All of the interviews were conducted during a regular school day--at lunch hour or during preparation time--or immediately after classes ended for the day, at the discretion of the respondent.

An informal introduction, lasting approximately five minutes, preceded each interview. This allowed the interviewer and respondent a brief opportunity to become somewhat relaxed with each other and hopefully contributed to the creation of a friendly atmosphere conducive to free and open discussion of the data being solicited. Stress was placed on the importance of the information provided by the respondents for the insights into curriculum planning by teachers that it would engender. They were reminded of the confidentiality and the freedom to opt out of the study promised to them when initial contact had been made.

A small audio cassette tape recorder was brought into the interview area. Each respondent was asked if the interview session could be taped so as to eliminate the need to keep extensive notes during the interview and to facilitate subsequent analysis of the data. Assurance was given that the tapes would be erased after the data had been transcribed. All respondents agreed to allow the session to be recorded, and no apparent notice of the presence of the recorder was taken once the session commenced.

Each question in the interview guide was read to the respondent in the pre-established order. Deviations from the guide were made only for purposes of clarifying a question or comment or soliciting further detail from the respondents. The entire session was recorded on tape except while respondents were completing the Teacher Opinionnaire/Rating Scale.

At the conclusion of the interview, respondents were given the opportunity to add any comments to what they had already contributed, either supplementary to what they had previously stated or related to curriculum planning in some fashion not brought out by the interview guide.

The audio tapes of each interview session were transcribed in order to facilitate the process of analysis of the data. The audio tapes were reviewed a second time to ensure that the transcription was accurate and complete.

Data Analysis

The interview transcripts were analyzed to answer the research questions of the study. Analysis of the data from each part of the interview guide seemed to require slightly different paths. These paths are discussed in this section.

Data collected in Part One of the interview guide--General Perceptions of Curriculum Planning--were handled on a question by question basis. Each question was used as an organizer for compiling any information pertaining to that question in all thirteen transcripts. The information was subsequently condensed by the researcher to a more manageable statement without loss of relevant content or meaning. Categories of meaning were identified, and each condensed statement was assigned to one or more of these categories. Finally, relationships among the categories were discerned, with the results being presented and discussed in Chapter IV.

The condensed and categorized statements of the teachers of the gifted/talented and of the teachers in the regular program were collected separately. Intra-group comparisons of similarities and differences were made first, followed by comparisons between the two groups.

An illustration of the data analysis procedure, using data from the interview transcripts pertaining to question 6 in the interview guide, is perhaps the most effective means to demonstrate the researcher's methodology.

When prompted to discuss the personal benefits that they perceived to accrue to themselves as a result of the curriculum planning in which they engaged, two respondents--identified for this illustration as G1 and R1--expressed their views in the following ways.

> "Um, well, I think as a result of good planning, it is easier for you to evaluate what it is that you are trying to teach the kids, or what it is that you want them to learn. If you had no plans, the kids can still learn things in that if you're a Science enthusiast, there's lots to give the kids in terms of knowledge, but it becomes difficult to evaluate that sometimes, I think. In terms of a formal kind of evaluation." (G1)

> "I, I think the more you plan, the less stress you're under. Uh, quite frankly, when I think about the times you roll into school and you're not prepared, you find yourself under a great deal of stress all day long. And it's stress that you created for yourself because you haven't taken the time the night before or the morning before to plan. And, I don't like it, and I hate stress and I do everything I can to avoid a stressful situation. And usually I'm pretty good at it; I'm not an uptight kind of person, and I think however minimal the planning might be, I think it's usually pretty successful because it avoids the stressful situation for myself and my kids. The kids know when you're not planned. When you haven't got anything planned, the kids know that, and they get uptight, and of course, it's a reflection on you and it's a reflection on the whole system, when

everybody's uptight. And I think not being planned creates a stressful situation more than anything else." (R1)

A condensed statement, or statements, was formulated around the information contained in these excerpts. For example, the comments made by Respondent G1 resulted in the following condensations.

1. Good planning provides the teacher with a sense of direction.
2. Good planning makes it easier to evaluate student achievement.

Similarly, the following statement represents the thinking of Respondent R1.

1. Adequate planning results in the reduction of stress for the teacher and, ultimately, the students.

Once these, and other, statements had been collected from the remaining eleven respondents, obvious relationships began to appear among them, resulting in the creation of broader categories of responses. For example, the following statements based on data from teachers of the gifted/talented indicate benefits related to teacher performance.

1. Good planning provides the teacher with a sense of direction. (G1)
2. Good planning makes it easier to evaluate student achievement. (G1)

3. Through planning, the teacher is able to anticipate future events/needs/materials in advance. (G2)

Similarly, four statements based on data from teachers in the regular program all refer to the psychological benefits inherent in planning.

1. Adequate planning results in the reduction of stress for the teacher and, ultimately, the students. (R1)
2. There is personal satisfaction to be had from developing successful curricula. (R2)
3. Personal enjoyment is derived from engaging in curriculum planning. (R3)
4. Curriculum planning creates a greater feeling of organization and preparedness. (R5, R6)

Intra-group and inter-group comparison of similarities and differences was greatly facilitated by the re-organization of the statements into these broader categories. The statements made in response to each question were examined in order to highlight the similarities and differences, first among teachers of the gifted/talented and then among teachers in the regular program. Once these areas had been highlighted, similarities and differences between the two groups were similarly noted. This procedure formed the basis for the reporting of the findings in Chapter IV.

Analysis of the data for the second part of the interview guide--Teachers' Planning Models--followed a somewhat different approach than that just described. The respondents' rather extensive descriptions of their planning models were submitted to a process of summarization in order to separate out the important elements from the expository remarks and examples. These summaries were then converted into flowchart representations of the models to better discern the relationship of the various parts with the whole and especially the order of those parts.

The seven flowcharts pertaining to the planning models of teachers of the gifted/talented were juxtaposed and unifying elements between the models were noted. (An element was considered to be unifying if it appeared in three or more planning models.) The same was done with the six flowcharts depicting the planning models of teachers in the regular program. The thirteen flowcharts were then compared across the two groups, so that similarities and differences between the groups could be discerned.

The Teacher Opinionnaire/Rating Scale necessitated yet another form of data analysis. In this case, the ratings assigned to each factor in the opinionnaire were simply tabulated for both groups. When these results were compared, they were scrutinized for discrepant emphases between teachers of the gifted/talented and teachers in the regular program--indicated by a difference of two or more responses between the groups in any one rating category--or for any unusual occurrences that showed up in how the various factors were rated. Similarly, if any factors appeared as important emphases for nine or more teachers across both programs, they were also deemed worthy of note.

The analysis of respondents' comments outlining their rationales for assigning the ratings they did and for explaining the relationship between those factors and their planning reverted back to the analysis procedures described for the questions in the first part of the interview guide.

Data from Part 4--Personal and Professional Data--were merely tabulated and juxtaposed in order to demonstrate the attempt to match the respondents among teachers of the gifted/talented with their counterparts among teachers in the regular program (see Figure 3). It did not form any part of the analysis reported in Chapter IV.

Minimizing Researcher Bias

This study was based on an assumption of differences between the preactive curriculum planning of teachers of the gifted/talented and that of teachers in the regular program. Given such an assumption, the problem of researcher bias in the collection and analysis of data must be addressed. An attempt was made to minimize this bias in three distinct ways.

The researcher interpreted the responses from each teacher in the context of the entire interview. This amounted to determining if the response to a given question by a teacher was supported or contradicted by his or her responses to other questions. The degree of internal consistency within each interview proved to be extremely high. Therefore, the researcher was able to approach the data with the assurance that the consistency of each teacher's responses increased the likelihood of accurate reporting on his part.

To further insure that the meaning or intent of each teacher's responses would not be distorted by researcher bias, the researcher solicited the assistance of a third party not connected with the study who was able, at regular intervals, to verify the accuracy of the researcher's interpretations of the data.

And finally, the use of the Teacher Opinionnaire/Rating Scale introduced a degree of objectivity into the data collection. When the data from this instrument were juxtaposed with the interviews themselves, the test of internal consistency could again be applied.

CHAPTER IV

FINDINGS AND DISCUSSION RELATED TO CURRICULUM PLANNING BY TEACHERS

This chapter presents the findings related to the research questions underlying the study. The chapter has three major divisions, each corresponding to a section of the interview guide used in the study. These divisions are: General Perceptions of Curriculum Planning, Teachers' Planning Models, and Factors Influencing Curriculum Planning by Teachers. (The fourth section of the interview guide, Personal and Professional Data, has been reported in Chapter III.) Data will be presented, by turns, from the perspective of the two groups participating in the study--teachers in the gifted/talented program and teachers in the regular program--followed by a discussion of similarities and differences arising from the parallel examination. Some of the data lend themselves to quantitative analysis, while others are more appropriately suited to descriptive analysis.

It is convenient to note here that teachers occasionally refer in their comments to the Program of Studies for Elementary Schools (hereafter called the Program of Studies), a document outlining the curricular requirements mandated by Alberta Education.

General Perceptions of Curriculum Planning

The first section contains findings related to some general perceptions of curriculum planning by teachers. These include teachers' attitudes toward planning, the types of planning in which teachers engage, their personal preferences for certain types of planning, indicators of effective planning, the perceived benefits for engaging in planning, and preparation for curriculum planning through teacher education.

Attitudes Toward Curriculum Planning

Three questions in the study focused on the teachers' perceptions of the notion that all teachers are curriculum planners, and also on their perceptions of themselves as curriculum planners and decision makers (see questions 1, 2, and 7 of the Interview Guide found in Appendix B).

Teachers of the Gifted/Talented

In reacting to the statement that classroom teachers are curriculum planners, all seven respondents indicated that this was indeed the case, supplying a variety of statements to support and elaborate on that perception. Five of the respondents stated that curriculum planning was a necessary function of the classroom teacher. Teachers were seen to function as intermediaries in the task of translating the general outlines provided by the provincial curriculum into the specific learnings to be achieved at the classroom level. Understandably, the provincial guidelines cannot prescribe the degree of specificity that operates at this level, given all the physical and demographic variables involved. The teacher, therefore, takes over where the province leaves off.

Taking this thought one step further, two of the respondents noted that curriculum planning was the vehicle through which these specific learnings could be even more appropriately refined and tailored to the unique constraints and opportunities offered by a given classroom at the level of the practitioner. This amounted to a sort of "fine-tuning" of these previously identified specific learnings.

Elements of timing and continuity of instruction entered into teachers' thoughts about curriculum planning as well. One respondent felt that curriculum planning promoted the development of a sense of timing, a necessary consideration in the face of an extensive syllabus to be covered at any grade level. A second respondent indicated that planning allows teachers to organize their curriculum with minimal danger of overlap with previous and/or subsequent instructional years. Both of these aspects of curriculum planning tended to focus on the administrative dimension of teachers' planning for instruction.

Curriculum planning, it was noted, could be a group endeavor as well as an individual effort. Several of the teachers made passing reference to their participation in cooperative planning sessions with colleagues at both the school and district levels. This was necessary because the curriculum for the Academic Challenge Program is still very much in its formative stage.

One of the respondents voiced a personal concern that teachers may not be competent at the task of curriculum planning or, worse, may abuse the responsibility placed on them, to which at least one well-publicized case in Alberta will attest. Similarly, teachers may not wish to be involved in curriculum planning at any level for a variety of reasons. These conflicting aspects attendant on curriculum planning, in the opinion of this respondent, placed severe restrictions on the quality of curriculum planning being done. By implication, the quality of instruction based on it could be suspect as well.

When asked to relate these general perceptions of all teachers to their personal experience as curriculum planners, respondents were prone to describe their relationship with curriculum planning in an interactive sense, as a dialogue of sorts between themselves and the curriculum. Planning involved the generation of a dynamic structure fabricated by the planner from all the available elements, including those prescribed by Alberta Education as well as other resources perceived to be germane to student learning. Value judgments and responsible decision making were the interactive vehicles in the planning process, and they ultimately dictated the curriculum to be taught. The freedom to make curricular choices was mentioned as being of particular importance in this regard. As one respondent affirmed, "I like being able to make some of my own choices. I try to make them reasonably and responsibly so that they have what I consider to be the children's best interests at heart."

In terms of time spent, one respondent noted that curriculum planning occupied the greatest proportion of the teaching day, whether it was pre-active, interactive, or post-active. The thinking that was done about the students and about appropriate learning strategies for them consumed the most time and energy.

Two of the respondents presented themselves in the role of curriculum planner by virtue of their involvement in the ongoing construction of instructional packages for use within the Academic Challenge Program. Their initial expertise, supplemented by the additional experience gained through their involvement in this group endeavor, enabled them to make valuable contributions to the program beyond their immediate classrooms.

The personal satisfaction that comes with being the author of original curricula, to whatever extent that originality is taken, was noted by one of the seven respondents in this group. While it was conceded that pre-planned units had their place, an element of personal enjoyment derived from creative expression was evident when the teacher acted as a curriculum planner to this degree.

When asked to comment on their attitudes with respect to the decision making function that is so integral to curriculum planning for classroom instruction, a wide spectrum of perceptions was offered. Basic, however, to all their perceptions was the understanding that curricular decision making was part of, if not fundamental to, their role as teachers. When reflecting on the training received in various curricular areas and the background gained in the psychology and development of children as part of the teacher education process at university, one respondent stated:

> "...I like to think that I come to a group of children, and that I can assess them validly, and on the basis of that assessment I can then make some judgments about what would be good for their education. On the basis of that, then, I plan, and that planning, in turn, I like to think was truly based on careful

> thought and knowledge, rather than just someone from above saying, 'You must do so-and-so, and here is the unit that you follow.'"

There was satisfaction expressed in the fact that, while Alberta Education dictated the general direction to be followed in the Program of Studies, the means to the end were entirely in the hands of individual teachers, within reason, of course. The possibilities for unleashing one's creative impulses in seemingly endless ways through curriculum planning were cited as a related aspect of this sense of freedom. The provincial guides were seen as providing a starting point for planning, but at least one of the respondents openly stated that teachers of the gifted needed to move beyond those parameters since, while they might be entirely appropriate for the regular program, they were inadequately responsive to the needs and abilities of the gifted/talented. A second respondent alluded to this need, though it was expressed more in terms of a responsibility, to select curricula for their intrinsic value as perceived by the practitioner. Such curricula might not be included in the curriculum guides per se, but were nevertheless seen to be a valuable adjunct to prescribed student learnings.

This is not to say that the freedom to make curricular decisions was taken lightly. The role of decision maker carries with it a tremendous responsibility and places an awesome power in the hands of the practitioner, according to another respondent who, additionally, expressed concern over the dangers of inadequately monitoring these decisions.

> "...although I tend to trust myself, I don't know that I would want somebody to give me that kind of trust, you know? It's like blind faith. They're entrusting their kids with us and if we're making any decisions that we jolly-well want to, that's kind of scary. On the one hand, I think it's neat because I think that, used wisely, that kind of power can be healthy, but I think you need to have some kind of safeguards and some kind of protection because I don't want to end up being sued either. And so, you need to have something in place that sort of guarantees that you are a part of something bigger. And if you are making your own totally autonomous decisions, I think sooner or later you have to come back to fit the rest of the puzzle. And so there has to be a balance and as long as that balance exists, I think it is good. If it becomes unbalanced, I think you're bordering on some areas that you don't need to be. I don't want to bring up somebody else's kids. I don't want the responsibility of being totally charged with the future of somebody whose power lies within them, not me. So I think I would appreciate some supports for what we do."

It was pointed out by one respondent, and substantiated indirectly by all the others, that students in the Academic Challenge Program participate to a greater extent in the decision making process itself compared with students in the regular program and take upon themselves more of the responsibility for what they will learn. In effect, then, the teacher becomes more of a facilitator, and less an arbiter, of the process and, consequently, makes fewer of the decisions that normally attend curriculum planning. Another respondent, who also involved the students heavily in curriculum decision making, felt that the process was no less time consuming personally.

Teachers in the Regular Program

The predominant view held by the six respondents in this group was that, while teachers functioned as curriculum planners, their role was essentially one of elaborating, modifying, or adapting the prescribed objectives outlined in the provincial Program of Studies. As one respondent noted:

> "...we're kind of at the front lines here. We get the objectives, we get the kids, and we have to match them up. And in between, that's what we do--curriculum planning."

This view notwithstanding, another respondent implied that such adherence to prescription was not curriculum planning in the fullest sense, but more of an exercise in translation of curriculum into instruction. More and more teachers, it was asserted, seem to be moving beyond strict reliance on prescribed textbooks, curriculum guides, and established objectives, and into "actual curriculum planning."

Relating their general views of teachers as curriculum planners to themselves personally, three of the respondents in this group perceived their role to consist of two distinct stages: (a) determining what the parameters of the curriculum were, and (b) approaching their teaching of the curriculum in their own diverse, individualistic styles. A fourth respondent added that determining where the students were functioning in relation to the established parameters was an integral part of the first stage and helped to set the course for the second stage.

In the view of one other respondent in the group, one is a curriculum planner by being involved in the planning process, engaging in a variety of kinds of planning, and evaluating those plans on a day-to-day or year-to-year basis. Another felt that only when original material was being developed or redesigned out of old could the designation truly apply.

The respondents' views of the task of making curricular decisions about what the students in their classrooms would learn revealed a wide range of responses. Appreciation for the freedom to do so, as well as the responsibility that attends the freedom, was stressed in one way or another by all the respondents in the group. Four of the respondents went so far as to state that it was essential to their teaching for various reasons. One reason was that curriculum is not a static entity but, rather, is in constant flux. The teacher must be free to approach it in ways that are appropriate "to the times in which we live."

Developing this freedom and responsibility theme along different lines, two respondents voiced their desire to be able to interpret the curriculum to suit the extreme heterogeneity presented by children's needs and abilities in today's typical classrooms. Curricular decision making was deemed essential to meeting those needs and abilities and, subsequently, to generating student satisfaction with their learning.

Teacher satisfaction and adequate teacher performance were cited by one respondent as positive benefits of having input into curriculum and of working within a curriculum that offers a degree of flexibility in its interpretation. In the view of that respondent, competence in curriculum decision making was seen to increase with experience.

Comparison of the Two Groups of Teachers

There was strong agreement across both groups that classroom teachers are, in fact, curriculum planners. All respondents expressed the view that curriculum planning is an essential component of the teacher's role in which the teacher functions as an intermediary between curriculum and instruction. However, teachers in the regular program perceived their function to be one of translating prescribed curriculum into instruction. As one respondent explained it, teachers are strategists, matching objectives and students in order to set a course for meaningful learning.

Teachers of the gifted/talented felt their role involved transforming the curriculum beyond the parameters established by Alberta Education. They were cognizant of those parameters, but were predisposed to express their appreciation for other dimensions within the planning function as well. Recognition of the fact that planning enabled the teacher to modify the curriculum until it uniquely suited every learner, that the flow of teaching was facilitated by the teacher's overall sense of time and place within the "big picture," and that curriculum planning did not have to be a solitary event but could, in practice, be a communion of people and ideas, added an element of anticipation that went beyond mere translation of curriculum into instruction.

Teachers' perceptions of themselves as curriculum planners were equally diverse. Taken at the most basic of levels, all thirteen respondents saw themselves planning with two main considerations in mind. To be effective, planning involved the determination of what the requirements of the curriculum were, as expressed in the provincial guides (often referred to as "core curriculum" throughout the interviews), and the formulation of strategies to best address those requirements, given student needs and abilities. For teachers in the regular program, these were areas that set the limits of their planning function. Teachers of the gifted/talented, however, felt drawn beyond those limits because of the unique demands placed on them by the students they teach.

Once again, teachers of the gifted/talented described a broader range of views about their personal roles as curriculum planners. The sense of transforming the curriculum rather than simply translating it was substantiated in their statements about interacting with the curriculum and making selective judgments and decisions that ultimately determined what would be taught. From the kinds of declarations made regarding the time and energy consumed by planning and the satisfaction gained from engaging in creative endeavors, alone or with colleagues, it was apparent that tremendous value was placed on the process of curriculum planning as well as in the product derived.

While it was agreed that all teachers are curriculum planners to a greater or lesser extent, there seemed to be a range of enthusiasm expressed as far as the actual doing of it. The respondent who voiced reservations with regard to teachers who lacked the ability and/or the desire to become involved with curriculum planning was raising a valid issue. Several respondents among the teachers in the regular program expressed their reluctance to become heavily involved in curriculum planning both within and outside of their own classrooms, primarily because of the expenditure of time and effort required. While teachers of the gifted/talented might have similar concerns, they nevertheless engaged in the process, if only because of the lack of material available for the Academic Challenge Program at the present time.

In one context or other, all respondents expressed their appreciation for the freedom they possessed in making decisions about the curriculum and their proposed teaching methodologies, citing teacher and student satisfaction as the main benefits to be realized. Teachers in the regular program exercised their freedom within the parameters of the curriculum, while teachers of the gifted/talented experienced greater freedom as a result of the mandate they have to differentiate the curriculum for their students.

At the same time, all respondents recognized and accepted the responsibility resting on them to make reasonable and accountable curricular decisions. Perhaps by virtue of some of the characteristics generally attributed to gifted students such as precocious language and thought, and advanced interests, teachers of the gifted/talented seemed to focus more on this particular aspect of curricular decision making. Provincial curriculum guides were seen to function as the starting point for what is known, in the terminology of education for the gifted, as "differentiated curriculum." Teachers of the gifted/talented have the responsibility to cover the core curriculum requirements for their students as per the Department of Education. But then, to better meet their students' advanced learning needs and abilities, it becomes necessary to move into other domains not specifically included in the provincial mandate. Here, the burden of responsibility lies on the teacher's sense of judgment as to what curricula are of value and relevance to these students. This burden was keenly felt by one of the respondents, though this thinking was not necessarily representative of the entire group.

An interesting point that was brought out concerning curricular decision making by teachers of the gifted/talented was the fact that students in gifted programs have a greater share of the responsibility for what they will learn than their peers in the regular program. Teachers in this group were more willing to divide this responsibility between themselves and their students which, to a great extent, mirrors the altered role that they have as facilitators of learning. This orientation tended to add shades of meaning to many of the statements that were made with respect to curricular decision making.

Conclusions

1. All respondents supported the notion that classroom teachers are curriculum planners. However, teachers in the regular program perceived their function to be one of translating prescribed curriculum into instruction, whereas teachers of the gifted/talented felt their

role involved transforming the curriculum beyond the parameters established by Alberta Education.

2. All respondents saw their personal role as curriculum plannners operating within two distinct areas of operation, namely, to discern what needs to be taught and to decide how to teach it. For teachers in the regular program, these were areas that set the limits of their planning function. Teachers of the gifted/talented, however, felt drawn beyond those limits because of the unique demands placed on them by the students they teach.

3. All respondents expressed their appreciation for the freedom they possessed in making decisions about the curriculum and their proposed teaching methodologies, citing teacher and student satisfaction as the main benefits to be realized. Teachers in the regular program exercised their freedom within the parameters of the curriculum, while teachers of the gifted/talented experienced greater freedom as a result of the mandate they have to differentiate the curriculum for their students.

4. All respondents recognized, and accepted, the responsibility resting on them to make reasonable and accountable curricular decisions. Again, teachers of the gifted/talented, by virtue of their mandate to provide a differentiated curriculum, tended to focus on their sense of responsibility to a greater degree. There was also a sense, perhaps, of feeling less secure about making such decisions

outside of the prescribed boundaries set by the province.

Types of Curriculum Planning

The literature on teacher planning cites eight different types of planning in which teachers typically engage. Two questions were designed to determine what types of planning were normally practiced by teachers in the study sample and the types of planning they preferred in terms of its importance and utility in the classroom (see questions 3 and 4 in the Interview Guide, Appendix B).

Teachers of the Gifted/Talented

A total of seven different types of planning were cited by the respondents in this group. Table 1 records the kind and number of responses that were brought forward.

Six respondents made reference to long-range, or yearly, planning and, of these, five respondents cited it before any other type of planning. The importance of this type of planning became evident in statements made concerning the need to have a grasp of the "whole picture" or a general sense of direction for the year's instructional endeavors. It is important to note that, in reference to their yearly planning, all six respondents cited their adherence to the use of a global theme to guide their subsequent planning throughout the course of the instructional year. (Although the seventh respondent did not mention yearly planning in the listing of planning types, it was nevertheless made clear that the global theme provided the sole

Table 1: Types of Planning Cited by Respondents in Both Groups

Type of Planning Cited	Teachers in Gifted Program	Teachers in Regular Program	Totals
(1) Long-range(yearly)	6	6	12
(2) Unit	6	4	10
(3) Monthly	2	0	2
(4) Short-term	3	3	6
(5) Weekly	3	1	4
(6) Daily	5	6	11
(7) Lesson	0	1	1
(8) Cooperative	3	0	3
(9) Organizational Principles	0	1	1

planning focus in all other types of planning engaged in.) Themes such as "Change" or "Surviva l" provided the impetus for integrating all subject areas into one unifying body. This emphasis on broad-based student learning is one of the hallmarks of education for the gifted/talented (Kaplan, 1974; Passow, 1982).

As an aside, the need for flexibility in yearly planning was specifically stated by two of the respondents. One respondent saw the classroom, not merely as an intellectual environment, but as a social and emotional environment in which the students' needs and interests dictated to a great degree the curricular slant to be pursued. A rigid structure would fail to be responsive to those concerns.

Similarly, flexibility in yearly planning was seen to facilitate the decision making capacity of the planner to identify and priorize those elements within the curriculum deemed to be of most importance with respect to the curricular guidelines, the personal strengths and interests of the planner, and the interests of the students. Again, a rigid structure would impose severe limits on these pivotal considerations.

All six respondents agreed that the long-range perspective enabled the shorter-range planning to be accomplished with greater efficiency and effectiveness. With the general framework in place, it was possible to break the whole into its component parts, either by subject area or by increasingly subdivided blocks of time. One of the respondents described the importance of having a clear view of the "big picture" on subsequent shorter-term planning:

"I can come up with fairly rapid-fire, immediate things after I

> kind of know where I'm going. But I need to have an objective. I need to know what it is I want to do first. If I'm not clear then it becomes difficult for me; it's drudgery, the parts don't seem to fit, and I don't get a sense of direction. So I have to kind of know where I'm going and then I can say, 'Ok, well, in order to get there, I need to do this first' and then the prerequisites and things come into light."

Short-range types of planning varied in length from short-term (a period of six weeks was frequently mentioned, though periods of time amounting to more than one week and less than four weeks also applied), to daily planning, with monthly and weekly planning falling in between. Individual subject areas were accommodated within these time allotments, with varying degrees of integration applied to them. The time blocks enabled the respondents to operate along more manageable lines than those afforded by the yearly plan and still remain faithful to the overall scheme. The need to juggle these various planning increments within the general framework was partially explored by one of the respondents:

> "You have an image in your mind of what you want in the long-term, so you have to plan for that...but you also have to have something that you're doing during that particular twenty minutes or hour of the day....So you have to keep both a minimum depth of field and a maximum depth of field in your mind constantly and try and make this a part to fit the whole in a relationship [if it is] to be a compatible one."

Six respondents cited unit planning in their listing of types of curriculum planning engaged in. In subsequent comments, it was specified that units designed for the Academic Challenge Program were multidisciplinary in scope to the degree that was realistically possible and/or desirable. At the same time, all units were completely tied into the global theme that had been established at the outset of the instructional year.

A final type of planning that was mentioned involved an element of cooperation in its resolution. Cooperative planning between colleagues was cited by two of the respondents who, because of common grade level placements, saw their efforts rendered more efficient by the sharing of ideas.

A third respondent viewed cooperative planning as a joint effort between the students and their teacher. While the teacher was responsible for determining and maintaining the appropriate direction and impetus for the curriculum to be covered, the students were seen by their teachers to have considerable input into the actual content to be learned. Although cooperative planning was crucial to this one respondent's planning endeavors, the other six respondents in the group did allude to this same tendency to involve their students in the decision making domain of curriculum planning.

When asked to identify the type of planning that was most helpful to them as classroom teachers, five of the seven respondents stated a preference for long-range planning. They felt that long-range planning gave them the greatest sense of continuity and purpose, expressed variously as "the big picture", the global perspective, or the long-term direction and/or goals. At the same time, the structure that was provided by long-range planning was deliberately made flexible in order to accommodate both the spontaneous and tangential learning that often characterizes classrooms for the gifted/talented as well as the varying intellectual, social, and emotional needs of the students. A further benefit to long-range planning was the facility with which shorter-term planning was achieved once a clear direction had been established.

The remaining two respondents expressed a preference for unit planning over other options. One respondent felt that unit planning allowed the teacher and the students to function within a more manageable block of time and material, a consideration based on the practicalities of teaching and learning. The tendency of unit planning to best suit certain of the learning characteristics of gifted/talented children was cited by the second respondent, who saw students' needs and abilities to engage in content in greater depth and over extended periods of time to be decisive factors dictating the predominance of unit planning over other types of planning.

Teachers in the Regular Program

As shown in Table 1, a similar range of planning types was enumerated by respondents in this group.

All six respondents cited long-range planning as basic to their planning for the entire year. However, two of these six respondents perceived their long-range planning to have become second-nature by virtue of their exposure to the same curriculum at the same grade level over an extended period of time. For them, formal long-range planning was obviated by the degree of familiarity they had with the curriculum.

Unit planning by subject was mentioned by four respondents, and it usually focused on a theme or topic within that subject. However, one of those four described unit planning in multidisciplinary terms, indicating a preference for the integration of several subjects into the same theme. This same respondent went on to describe daily planning as the vehicle for maintaining that sense of integration in a way that lesson planning could not achieve.

The other five respondents cited daily planning in its commonly understood form, subject by subject and period by period. Short-term and weekly planning were mentioned least often, three and one times respectively. Lesson planning was mentioned by one respondent in the context of injecting an isolated skill or concept as the need arose and not as a typical planning mode.

A uniquely individual type of planning was described by one respondent as being based on what was termed "organizational principles." By definition, these were broad concepts used to organize all that happened in the classroom, closely approximating the notion of "routines" which has been an important focus of research into curriculum, and other, planning by teachers.

When asked to state a preference for one type of planning that, out of all planning types cited, was most helpful to them as classroom teachers, three respondents opted for unit planning. The respondent with the multidisciplinary approach to thematic units found that integration of a number of subject areas was facilitated by this type of planning. A second respondent perceived the unit format to be the most effective way of maintaining the flow of the curriculum which is, of necessity, broken down into daily increments. The final respondent stated a preference for prepackaged units which, considering the veritable potpourri of topics, strategies, media, groupings, and evaluative techniques from which to choose, considerably lighten the teacher's workload.

Daily planning was the overall preference for two respondents. They were seen by one respondent to provide the most detail and depth for the teacher and, consequently, were of most value in the transmission of content to the students. The second respondent felt that long-range planning became less important as it became increasingly internalized by the teacher until, ultimately, daily planning assumed greater prominence.

The final respondent did not declare a preference for any one type of planning, but insisted that all types and levels of planning were necessary and of equal value and importance.

Comparison of the Two Groups of Teachers

With interesting exceptions, respondents in both groups appeared to engage in essentially the same types of curriculum planning. In descending order of scope, these included yearly (or long-range), unit, short-term, monthly, weekly, daily, and lesson planning. Of these, however, long-range, unit, and daily planning received the greatest number of responses from each group in the sample. These designations are perhaps understandable if one considers that they represent the usual frames of reference within which most, if not all, teachers operate. The remaining planning increments could be viewed as more of a function of each individual teacher's personal preference.

Exceptions were noted within both groups. Cooperative planning with students, emphatically endorsed by one respondent among teachers of the gifted/talented and subscribed to by the remaining six, is a dramatic departure from the teacher-centred planning currently practiced. This is not to say that students' needs and interests have not been previously considered; rather, it represents an altered view of the role of students in planning their learning--from passive to active.

The use of "organizational principles" in planning represents the other exception to the basic list of types of curriculum planning and has been likened to the concept of routines in teacher planning. In a teaching environment dominated by complexity and unpredictability, routines are a mechanism used to establish and regulate activities and simplifiy the teacher's planning, thereby increasing the predictability and reducing the complexity within the environment (Yinger, 1979). It is likely that routines are commonly used by experienced teachers but, in this study, only one respondent cited the fact in an overt manner.

It should be noted at this point in the discussion that several planning types cited by the respondents were subsumed into other categories already mentioned when it became apparent that the terms were being used interchangeably. For example, Incremental Planning was included with Short-term Planning and one respondent's "grocery list" planning was synonymous with Daily Planning. In one instance, it was obvious that one respondent's definition of daily planning was operationally different from the others because of the focus on integration, but it was nevertheless classified as Daily Planning.

When asked which type of planning was preferable to them in terms of importance and/or utility in the classroom, some major differences began to surface. Six of the seven teachers of the gifted/talented saw long-range planning as central to their curriculum planning, particularly since it enabled them to derive a clear orientation for their instructional year and also, perhaps, because it tied in so closely with their use of the global theme to guide their subsequent planning endeavors.

There was not this same unanimity among the teachers in the regular program when their planning preferences became known. Three of the six respondents focused on unit planning, two preferred lesson planning, and the sixth was unwilling to emphasize one type of planning over any other. For the five respondents who did state a preference, it became apparent that the reasons given in support of their choices were expressions of their individual teaching styles.

Conclusions

1. Teachers of the gifted/talented and teachers in the regular program engage in essentially the same types of curriculum planning, citing long-range, unit, and daily/lesson planning most often. The most notable exception to this generalization is the adherence on the

part of teachers of the gifted/talented to engage in cooperative planning with their students. While teachers in the regular program were bound to consider student needs and interests in the course of their planning, there was little, if any, evidence that student input into the actual planning was ever sought.

2. Teachers of the gifted/talented expressed a preference for long-range planning over all other options as it provided them with the guiding framework within which the global theme for the year could be developed. Similarly, it enabled the teachers to operate on the short-term without departing from the "big picture".

3. Teachers in the regular program expressed a variety of preferences, including unit planning and lesson planning, which appeared to parallel their preferred styles of teaching.

Indicators of Effective Planning

The next question in the interview prompted teachers to describe how they assessed the effectiveness of their planning (see question 5 in the Interview Guide, Appendix B). The question was presented in two parts: What tells you that things are going well in your classroom? and How do you feel this is directly related to your curriculum planning? The purpose of the question was to identify the impact of teachers' planning on the functioning of their classrooms. The researcher was assuming that, if teachers plan well, gains to students will be evident. It was also assumed that certain student behaviors would offer confirmation of the effectiveness of the teacher's planning.

The relationship between teachers' planning and student behaviors forms a two-way street. Undoubtedly, teachers recognize that effective planning on their part will contribute to an increase in the chances of student growth occurring. At the same time, teachers verify that their planning is, indeed, effective by noting student behaviors which suggest that such growth is taking place. If it is not, they make adjustments to their planning.

This reciprocal relationship is reflected in the duality of the question. Teachers' responses have been organized for reporting with this duality in mind.

Teachers of the Gifted/Talented

When considering the impact of their curriculum planning on their students, teachers of the gifted/talented submitted diverse responses, showing consideration of a significant number of student behaviors. Three respondents cited student interest and enthusiasm and/or motivation and the quality of their products as prime indicators of the efficacy of teacher planning. If these indicators are present, stated one respondent, the teacher has a sense of being "on target" in the planning of learning experiences that are motivating to the students and have challenged them to move into higher creative and productive thinking modes.

The other two respondents stressed the role of the teacher in generating this enthusiasm and interest. A teacher who is prepared, familiar with, and comfortable with what is to be taught, claimed one respondent, will communicate those feelings to the students who, in turn, will respond positively and enthusiastically. The second respondent felt that the teacher's ability to gauge--and willingness to explore--what is current or topical in the lives of students, and who plans accordingly, enhances student learning in both the input and output modes.

The presence of student success was cited by two other respondents as a noteworthy indicator of effective teacher planning, an indicator that seemed to be closely linked to student motivation and interest. The feeling here was that, if teachers in their planning established appropriate objectives for student learning and those objectives were successfully met, then the teachers had planned effectively. In a similar vein, a third respondent looked for a strong correspondence between the long-term goals targeted for the students and their observed behaviors.

This correspondence between goals and behaviors was further developed by a fourth respondent. Positive student conduct such as excitement in learning, the desire to invest time and energy into their learning, the ability to offer constructive peer evaluation and support were seen to be concrete reflections of effective teacher planning.

Such positive conduct was more readily apparent when, in the course of cooperative, or shared, planning, students were encouraged to "buy into" their learning. The teacher planned to allow the students to make "an emotional investment" in the study to be undertaken and to permit their free (with some guidance) choice as to how the study might be explored. Appropriate student response to the teacher's initiative affirmed the worth inherent in the strategy.

Tying interest and positive behavior together, this same respondent noted their impact on the students' subsequent products, their demonstration that learning had indeed taken place.

> "First of all, any student who is interested in what they're doing will produce many times better than if it's just handed to them. 'This is what we do today. Period.' Their interest and attitude is reflected in the quality of work they do."

This correlation between student interest/motivation/involvment and the quality of work produced was noted by three other respondents as well.

The students' psychological well-being, evidenced by their attitudes of relaxation, happiness, or enjoyment, was an important factor in determining the quality of one respondent's planning. Again, the teacher's role was stressed, this time in attending to the affective needs of the students in the course of planning the curriculum.

Two respondents noted the direct approach that students were wont to employ in making their approval or disapproval known to the teacher. When students make the teacher aware that they are enjoying or comprehending what has been taught, it reinforces that the teacher has planned effectively. How students react to what is taught often influences subsequent planning strategies and motivations.

Teacher satisfaction was cited as an important indicator that planning was on track. One respondent noted that the teacher derived a sense of satisfaction from students progressing as planned.

> "...if you have a clear idea of where it is you're going and you see that you're getting there, then you have something to measure it by. If you don't know where you're going, then one of the quotes is, 'To a ship that knows not to what port it sails, no wind is favorable.' Like, what difference does it make what they're doing if you don't know if it's in keeping with where you're going?"

This evaluative stance was equally beneficial when the focus was on the planning itself; satisfaction could be gained from assessing the plans themselves in the light of professionally accepted criteria, such as those propounded by The National/State Leadership Training Institute of the Gifted/Talented (Passow, 1982), and verifying their worth, which was a valuable exercise advocated by one respondent.

Parental feedback was mentioned by another respondent who noted that students who were enthused or satisfied with what was happening in the classroom tended to express those sentiments at home. Parents, in turn, relayed the information back to the teachers, either directly or indirectly.

Teachers in the Regular Program

Responses from teachers in the regular program about the effectiveness of planning was less diverse. Three respondents felt that the apparent motivation, interest, and enthusiasm displayed by their students as they approached the learning experience was a very strong indicator that planning was appropriate. As one respondent pointed out, the more carefully thought out and planned the curriculum was for the students at a given level, the more successful and effective it was. Also, if the planning were based on teacher-constructed units of study, there were the added benefits of the unit being totally suited to the particular students for whom it was designed and of the intended learning outcomes being clearly understood by the planner/practitioner. Closely related to the theme of interest and enthusiasm, two respondents noted that when children are busy and on task, effectiveness of planning is evidenced.

Three respondents cited positive student participation as indicative of appropriate or effective planning. One of the respondents stated a personal opinion that, if students are to remain positively involved, provision must be made for them to practice the day's skills in classtime and complete most of the day's assignments in school. This was a planning decision made on a daily basis.

Student feedback, referred to by five respondents, was a key indicator of effective planning by teachers, as measured by both formal and informal student evaluation. One respondent stated that a clear directional impetus promoted time on task and made student progress measurable in a variety of ways. The lack of such an impetus was likely to cause the teacher to proceed in a hesitant fashion, and the class would, in turn, sense this lack of confidence.

This type of feedback, in the estimation of a second respondent, served to enable the teacher to appraise student grasp of the material and discern whether or not extension and/or further development is necessary. These achievement indicators, stated a third respondent, usually compelled the planners to modify their curriculum in the required direction or perhaps to substitute entire activities or groups of activities.

A fourth respondent noted that student indicators could actually affect how teachers plan their lessons; when a certain planning style or format is found to be particularly efficacious for a specific group of students, the teacher may begin to rely on it almost exclusively, "...so the planning becomes sort of routine." This routinization was viewed in a positive light by this respondent.

Comparison of the Two Groups of Teachers

There was a strong sense among all respondents that indicators of planning effectiveness were many and varied. The majority of indicators tended to focus on such student responses as interest, motivation, enthusiasm, and success, as well as the time-honored "busy-and-on-task" acid test. Respondents in both groups noted the salient role of the teacher/planner in effecting this orientation to learning.

Apart from the success aspect mentioned by two respondents, there was a remarkable dirth of comments relating to student learning as an indicator of effective planning. Since student learning is the raison d'etre of education, this finding is extremely disturbing. One or two possible explanations immediately suggest themselves with respect to this apparent oversight. One explanation is that student interest or enthusiasm quickly shows itself to the teacher, whereas the extent of student learning may or may not be demonstrated until much later. Teachers may also have focused more on immediate indicators than on any other. Also, it is possible that teachers were operating with the notion of student learning in the context of evaluation and do not associate it with planning at all.

Positive student behaviors were clearly seen to signify effective planning on the part of the teacher, although for teachers in the regular program this was closely related to the participatory indicators mentioned above. Teachers of the gifted/talented were more cognizant of the higher level participatory behaviors that were desirable in their students and which were planned for over the long term. An extension of these expectations centered on the actual products pursuant to student learning, an area that is crucial in education for the gifted/talented. The feeling was that effective planning inspired quality production from the students.

Student feedback--formal or informal, observable or founded on intuition or conjecture--represented another area of focus by teachers in both groups in their consideration of indicators of planning effectiveness. Teachers in the regular program relied on their various evaluations of student progress to determine the effectiveness of their objectives or strategies, and from there, to make any necessary adjustments as dictated by those assessments. For their part, teachers of the gifted/talented viewed student success vis-a-vis long-term goals, the psychological well-being of their students, and students' first-hand reactions to be highly suggestive of their planning effectiveness. These latter indices incorporate a considerable subjectivity that is not present in the thinking of the teachers in the regular program.

Teachers of the gifted/talented went on to cite other indicators that had some impact on their evaluation of their own effectiveness as curriculum planners. Their personal satisfaction with the progress of events in the classroom was seen to bear substantial weight in establishing their planning effectiveness, as did their evaluation of the plans themselves. Plans that could stand up to rigorous assessment in the light of established criteria (e.g., the curriculum planning principles advocated by the National/State Leadership Training Institute of the Gifted/Talented) were deemed worthy to be relied upon in the ebb and flow of teaching. Second-hand reporting, such as that available from parents, was mentioned as a further means of verifying the effectiveness of one's planning.

Conclusions

1. All teachers rely on overt student response--interest, enthusiasm, motivation, success--to assess their planning effectiveness. The role of the teacher/planner in eliciting these responses was considered important. While probably not overlooking the objective measures, teachers of the gifted/talented demonstrated an appreciation for subjective indicators as well.

2. Effective curriculum planning tended to promote positive student behaviors indicative of their level of commitment to and involvement with the study in which they were engaged, although this was more pronounced among teachers of the gifted/talented. Teachers of the gifted/talented also differed from teachers in the regular program in the level of participatory behaviors planned for and sought, as well as in their emphasis on student products.

3. Teachers of the gifted/talented were alone in their identification of teacher satisfaction, evaluation of the plans themselves, and parental feedback as indicators of planning effectiveness.

Teachers' Personal Reasons for Planning

Respondents were asked to identify their reasons for engaging in curriculum planning (see question 6 in the Interview Guide, Appendix B). The intention of the question was for respondents to identify the benefits they personally derived from curriculum planning. This orientation is consistent with the approach taken throughout the study to confine the research to the more proximate aspects and perspectives of teacher planning; the kinds of statements made by the respondents verified that the researcher's intentions were achieved.

The respondents described a wide range of personal benefits to be gained from involvement in curriculum planning.

Teachers of the Gifted/Talented

The benefits derived from curriculum planning which were cited by teachers of the gifted/talented tended to focus primarily on benefits to teachers but also, interestingly, to their students.

Psychological benefits of planning were mentioned by five respondents. Personal satisfaction derived from involvement in planning was noted by three respondents who expressed their satisfaction in terms of the interest, the enjoyment, and the challenge to be had from their interaction with the planning process itself as much as from their creative handiwork. A fourth respondent described the correlation between good planning and the feelings of security and confidence that could be expected in subsequent instructional situations. High student performance and/or achievement, resulting from cooperative planning with students and focusing on their interests, was personally motivating to the fifth respondent.

Professional growth, cited by two respondents as an outcome of involvement in curriculum planning, was perceived as a benefit to teachers personally. It was felt, by the one respondent who commented further, that curriculum planning strengthened a philosophy of teaching and of education.

> "The more that I learn about curriculum planning, the more that I...see it as important, and the more that it kind of falls into place and gives you the woof and the warp of the fabric that you are trying to weave with the students."

Through a personally-imposed regimen of ongoing reading and introspection, it enabled this planner to actively fabricate a foundation or structure upon which to hang the daily learning experiences of the students. Because of this regimen, the planner was moved to view curriculum from a variety of perspectives so that the narrow classroom view of curriculum held by the practitioner would not predominate over the larger picture of the "curriculum for the planet."

In terms of the teaching task itself, two respondents made statements that indicated a direct correspondence between good planning and enhanced teacher performance. As an example of this, one respondent affirmed the ease of evaluating student achievement and of insuring student accountability on the basis of the intentions expressed in the plans. Curriculum planning, stated a second respondent, provides concrete evidence of teacher accountability as well; any outside evaluator, or even a parent, can be assured that nothing untoward is occurring in the classroom.

> "With accountability being a big thing these days, as far as evaluation and things are concerned, it's good to have something concrete to show a person that is evaluating you, that you have plans. And it just keeps you on the straight and narrow, sort of. You've got something to go on if you are ever questioned...and also with parent interviews."

Although accountability and enhanced teacher performance are not synonymous, there is a direct correlation perceived by these respondents insofar as they view being accountable as being effective.

The latter respondent also noted, on an entirely different tack, that planning enabled the teacher to anticipate future events, needs, or materials and act accordingly, a reference to the organizational strategies that teachers employ to ensure the smooth operation of the classroom.

Though at first seemingly out of sync with the context of the question at hand, two of the seven respondents made interesting statements about the benefits of their planning to their students. One respondent noted that the daily learning experiences of their students were made easier because, in planning, the teacher had provided a sense of direction and strategy for them to follow. In effect, student learning was facilitated by eliminating the uncertainty they might otherwise experience in the instructional/learning transaction. Approaching the same consideration from another angle, the second respondent described "the joy of children learning in a manner that is meaningful rather than random" as being an important benefit to the students first, but ultimately to the teacher as well. How these thoughts apply to teachers' perceived benefits to themselves will be fully addressed later in this section.

Teachers in the Regular Program

Responses from teachers in the regular program indicated that the benefits of engaging in curriculum planning also centered on teachers first, and then on benefits to their students.

Curriculum planning offered numerous psychological benefits, in the estimation of five respondents. Personal enjoyment in the process of planning was noted by one respondent.

> "I enjoy it. It's fun. It's like a puzzle almost; it engages my mind, and I enjoy sorting out the concepts and working to a logical conclusion. I just enjoy that sort of activity. I'm heavily involved in computers, which is kind of a natural outgrowth of that sort of involvement, too."

A second respondent expressed appreciation for the personal satisfaction experienced as a result of developing curricula that were not only worthwhile in themselves, but were also well-received on the part of the students.

Stress reduction, noted a third respondent, was an outgrowth of curriculum planning; the already high level of stress attendant on the teaching profession is unnecessarily compounded by inadequate planning.

> "I think the more you plan, the less stress you're under. Quite frankly, when I think of the times you roll into school and you're not prepared, you find yourself under a great deal of stress all day long. And it's stress that you created for yourself because you haven't taken the time ...to plan....When you haven't got anything planned, the kids know that, and they get uptight. And of course, it's a reflection on you and it's a reflection on the whole system, when everybody's uptight."

The final two respondents alluded to this same stress factor in their appraisal of the effect of planning on their sense of organization and preparedness.

However, the gains to be realized from being organized and prepared were seen to apply more profoundly when these same two respondents considered the relationship between curriculum planning and teacher performance. That is to say, being organized and prepared enabled the teachers to execute their various teaching tasks efficiently and effectively as a result of their prior planning.

The remaining three respondents cited other aspects of teacher performance that were enhanced by their curriculum planning. One respondent stated that both teaching and subsequent evaluation were facilitated by planning that was based on pre-established goals and objectives. Curriculum planning, according to another respondent, affords the opportunity to engage in a "dry-run" of the material to be covered, before the interactive phase of teaching began. On a more mundane level, curriculum planning was recognized by a final respondent for its contribution to the maintenance of the appropriate rate of coverage of the curriculum within the various time constraints impinging on the practitioner.

Two respondents touched briefly on student gains in the context of benefits to teachers. One respondent noted that students benefited tremendous~~ly~~ when their teachers possessed an orientation toward goal-setting that was reflected in their planning; students tended to follow the example and became more goal-oriented themselves. The curriculum could be rendered more powerful, affirmed the second respondent, by planning with the immediate needs and interests of the students uppermost in the planner's mind with, consequently, a more irresistible impact on the students themselves. Student enjoyment and enhanced motivation were cited as additional gains to be realized. Again, a possible explanation for this line of thinking will be discussed in the next section.

Comparison of the Two Groups of Teachers

In considering the perceived benefits of engaging in curriculum planning, all thirteen respondents focused, in turn, on the benefits accruing to teachers personally, and then, in a related sense, on those realized by students. Areas of overlap between teachers of the gifted/talented and teachers in the regular program were almost complete.

At this point, it should be noted that the responses from both groups appeared to fall naturally into distinct categories, although the respondents themselves did not seem to consciously follow such a deliberate line of thinking. One category consisted of perceived benefits to teachers, further broken down into three sub-categories, and a second category incorporating student gains that subsequently became beneficial to teachers. It is arguable that the latter category is in fact a sub-category of the first, but because it approached the notion of benefits to teachers from a more unique angle, it will be separately discussed.

Benefits accruing to teachers focused on three major areas--psychological well-being, teacher performance, and professional growth. Teachers' psychological well-being, a natural outgrowth of their involvement in curriculum planning, elicited the greatest number of responses from both groups in the study sample. While not necessarily uppermost in their minds, it is obvious that teachers have many good personal reasons for planning, not the least of which is the personal satisfaction to be gained from the pursuit. Another major consideration seemed to be related to the stress factor inherent in the teaching profession.

In the area of teacher performance, teachers in the regular program placed somewhat greater emphasis on factors that eased the demands of the instructional task than did teachers of the gifted/talented. Nevertheless, it was apparent that all teachers saw a direct correspondence between the level and quality of their planning and the smooth translation of those intents into classroom instruction. The majority of responses seemed to revolve around issues of accountability and evaluation, and lesser concerns such as pacing and organization, all of which, when appropriately addressed in the course of planning, greatly increase the chances for enhanced teacher performance.

Two respondents, both teachers of the gifted/talented, made mention of the professional growth to be gained from involvement in curriculum planning. Elaborating further, one respondent expressed professional growth as a function of the study and reflection that had to be pursued in order to mature as a planner. This area was completely overlooked by teachers in the regular program, which may not be significant given the size of the group.

Teachers' comments to the effect that student gains were ultimately personal benefits to teachers themselves presented an interesting twist in their reasoning. Describing benefits to students when the focus is on benefits to the teachers themselves may seem unusual. That is, of course, unless it is recognized that for some, if not many, teachers altruistic intentions--dedication to the well-being of others and a sense of commitment to their growth--play an important role in their motivations as teachers. It is not inconceivable that teachers plan in large measure with student growth and achievement in mind; when those events transpire, teachers have cause for personal satisfaction because of their contribution to those gains. This ties in very strongly with the sense of personal motivation, reported by one respondent, resulting from high student performance/achievement.

Conclusions

1. Teachers of the gifted/talented and teachers in the regular program perceive similar benefits for planning. An interesting exception was in the area of professional growth about which two respondents among teachers of the gifted/talented made mention. Teachers of the regular program made no comments in this area.

2. In terms of their psychological well-being, all respondents appeared to be cognizant of the personal benefits derived from their involvement in curriculum planning. These included such things as personal satisfaction--interest, enjoyment, challenge, motivation, stress reduction--derived from engagement in the process of planning, from the exercise of one's creative impulses, and from recognition of one's contribution to the edification of others.

3. Teachers in both programs planned in ways designed to ease the demands, and accompanying stress, related to the task of teaching.

4. Planning was seen by a significant number of respondents to enhance student growth and achievement; this, in turn, was seen to be ultimately beneficial to the teachers themselves, from a purely altruistic standpoint.

Preparation for Curriculum Planning Through Teacher Education

Two questions in the Personal and Professional Data section of the interview guide brought out some very interesting perceptions that teachers had regarding their pre-service and in-service training for the task of curriculum planning (see questions 16 and 17 in the Interview Guide, Appendix B). Because there were minimal differences among the respondents in each group or between the two groups, the information is presented as a discussion only.

The overwhelming majority of respondents in both groups felt that there were few, if any, courses at the undergraduate level which gave adequate attention to curriculum planning. At the same time, however, they did credit these courses--primarily Curriculum and Instruction courses--with providing some of the rudiments of planning, or for raising educational issues which contributed to their thinking about planning. Similarly, two respondents among the teachers of the gifted/talented cited courses in Educational Psychology for their contribution to curriculum planning, especially in terms of increased understanding of the students themselves.

At the graduate level, the picture was brighter for those who had been motivated to engage in a second round of teacher education. However, the feeling again was that, at best, training in curriculum planning was indirectly achieved through exposure to educational theory and philosophy. One respondent--a teacher of the gifted/talented--seemed to speak for the whole group in pointing out how inadequately prepared they felt when faced with the task of curriculum planning. A second respondent, this time a teacher in the regular program, spoke more forcefully about the level of preparation received prior to actual teaching.

> "On the whole, I cannot attribute a lot of what I am in terms of a teacher, who I am in terms of an educator....I can't, there's very little that I can attribute to my university. Now maybe that's cheating them of some credit, but myself, I found I learned the most by doing it on my own as a beginning teacher, and learning from my own mistakes and my own successes."

Learning by doing, together with in-service training, seemed to be the predominant mode for gaining proficiency as a curriculum planner, and much credit was given to personal experiences with curriculum writing on committees, Teacher Effectiveness training, and subject-related conferences. Five teachers of the gifted/talented in particular spoke highly of various guest speakers who had added immeasurably to their competence in planning, especially in terms of redesigning the curriculum, meeting the needs of gifted learners, and addressing specific planning components emphasized in gifted education.

Conclusions

1. Few, if any, courses at the undergraduate level of university provide more than minimal preparation for the exigencies of curriculum planning. However, there were courses in Curriculum and Instruction which contributed to their thinking about planning. Courses in Educational Psychology were cited for increasing the understanding that teachers had about their students, with subsequent impact on their curriculum planning.

2. Graduate level courses did not appear to make an appreciable difference in the level of preparedness teachers felt in curriculum planning.

3. Teachers credited the predominant share of their growth toward becoming competent curriculum planners to their own experiences with the planning task and to their in-service professional development.

Teachers' Planning Models

This section reports the findings related to the planning models utilized by teachers in the production of original unit plans, an activity in which most respondents claimed a moderate to high level of involvement. The respondents in both groups were asked to describe in detail the procedure(s) they followed in creating an original unit of study ~~for~~ their students.

In the planning simulation, the teachers were given the topic of Ecology and were asked to adhere to the following requirements: 1) the unit was to be original and not merely an adaptation of a prepackaged unit; 2) it was to model the planning procedures they had followed in similar situations in the past; and 3) it was to focus on the preactive phase of their planning (see question 8 in the Interview Guide, Appendix B).

From the outset, it became apparent that curriculum planning by teachers in both groups was a highly idiosyncratic process; any commonalities that existed were by no means representative of the group as a whole but merely constituted occasional unifying elements within each group and between the two groups. In this context, unifying elements are taken to be those elements in the planning models which were cited frequently by a group as a whole.

This section begins a brief summary of the planning strategy described by each respondent which will facilitate the presentation of the unifying elements and subsequent discussion. Each respondent has been assigned a numerical designation to indicate group association, G1 through G7 for teachers of the gifted/talented, and R1 through R6 for teachers in the regular program. The summaries and unifying elements have been presented from the perspective of the teachers of the gifted/talented and of the teachers in the regular program, in that order. The discussion that follows the presentation of the findings has been organized to consider areas of commonality within each respondent group, followed by an inter-group examination of similarities and differences.

Teachers of the Gifted/Talented

The planning models described by teachers of the gifted/talented are presented in summary form in the next section, followed immediately by a section highlighting the unifying elements that can be discerned among them.

Descriptions of Planning Strategies

The descriptions of the typical planning strategies engaged in by teachers of the gifted/talented follow.

Respondent G1. The topic is narrowed down using such criteria as availability of resources, particular planner interest(s), and/or time allotments. Broad learnings are sketched out, e.g., how the topic will be introduced to the group, and sequenced roughly over the designated time span. The formulation of objectives is implied by these broad lesson ideas and by the kinds of lessons that will evolve out of them. An important consideration in this is the mode of presentation to be used, that is, teacher-lecture or student-centered discovery, a decision greatly influenced by the availability and suitability of resource material. Having established a general direction and format, the activities are further refined and fleshed out with specific reference to AV, student assignments, organization, and a long-term assignment (the product) that would provide the major focus for the students.

Respondent G2. The curriculum guide for Science is consulted first to see what is required for a given level, establishing the fact that, for Grade 6, the study of ecosystems is mandated. The planner's own bank of knowledge and prior experience with the topic is probed in the course of locating resources of all kinds to draw into the study. Extensive attention is paid to any possible integration of subject areas, and activities suggest themselves in a sort of brainstorming phase as various subject disciplines are brought in. Having done this preliminary work, formal objectives are written which become the aims to be attained in the course of the study. This includes specific products that will be sought from the students. A time frame for the unit is established. It is anticipated that the students themselves will contribute much in the way of assuming responsibility for the subsequent development of the activities proposed for their learning once the groundwork has been laid by the planner. Intended evaluation strategies for student products are usually shared with the students from the outset of the unit.

Respondent G3. The planning process begins with the generation of as broad a range of ideas as possible using the mind mapping technique (divergence) followed by a period of narrowing down the possibilities with respect to the curriculum guide, the global theme for the year--selected on a district-wide basis for each grade level--and multi-subject integration. A planner-inspired issue for guiding the study, coupled with the decision to employ a more student-centred, discovery approach to resolving the issue, leads to the formulation of activities designed to incorporate higher level thinking, creativity, and decision making skills. A strong affective component is incorporated. The activities chosen suggest the type of evaluation to be used in the study. At all times, the planner recognizes the need to operate in a facilitative mode, providing the guidelines and structure for student learning, but allowing the students to function more or less independently within that structure.

Respondent G4. How the topic fits into the global theme chosen for the year becomes the first area of focus. The curriculum guide is consulted to determine what is core material and therefore necessary to cover in the various subject areas that might be relevant to this particular study. Sub-units within the unit are highlighted for consideration in the study depending on the time of year, what is available (e.g., for a pond study), the interests of the children, the availability of resources, and the planner's own background--a "pick-and-choose" process. Activities evolve out of these considerations and a logical sequence for their presentation (if teacher directed) or their examination (if student centered) is determined. The planner recognizes when it is appropriate to use a teacher-directed approach and when student inquiry is more beneficial. In a student-centered approach, student input into the proposed execution of the activities, with the guidance of the planner, is an important part of the planning process. Grouping varies with the activity. A culminating activity or finale is used to generate a sense of closure as well as to provide an opportunity for the students to share what they have learned.

Respondent G5. With a topic somewhat outside of the planner's realm of experience, the first step in the planning process is to become more knowledgeable, using a range of sources that includes colleagues, the teachers' resource centre, the library, and "experts". The planner attempts to discern what the body of knowledge about that topic is, and to ascertain how it might be made applicable to the particular students. Objectives are formulated in terms of student gains, and a time frame is established. Topics within the whole body of knowledge are selected for their adequacy in meeting these objectives, and specific activities are identified for the time alloted. Considerations of the content and manner of presentation, the use of certain in-class and out-of-class resources (guest speakers, field trips, AV), the type of product that the students will develop, and the students' varied abilities are resolved. The final step is a day-to-day breakdown of the unit into increments which are duly organized and refined. The resultant unit plan is viewed with the possibility of its being modified, sidetracked, and even abandoned completely depending on the emergent interests of the students themselves.

Respondent G6. Planning begins with establishing a focus on the theme and engaging in a mind mapping endeavor--in cooperation with the students--in order to generate all the possible avenues of study and to get the students committed to the study. While this is going on, the planner keeps in mind such information as the content itself, any possible sub-topics within that body of knowledge, the established objectives, the time frame, and an awareness of available resources. Students initiate the research process by identifying areas of personal interest, deciding on preferred modes of inquiry and likely sources of information, and reporting back to the group in some predetermined mode. This is all part of the planning process, though under a certain amount of guidance on the part of the planner. Evaluation is engaged in frequently at the peer level.

Respondent G7. Taking the broad-based theme as the organizer for the unit, a general direction is established. An organizing question or issue is formulated on the basis of this theme, and the possible integration of primary and secondary subject areas and attendant skill areas to be included are determined (approximating the objectives phase of planning). Planner-inspired strategies aim at soliciting student input--usually in the form of mind-mapping--to generate a conceptual framework. Eventually, some possible activities are suggested. These activities may or may not be expressly related, and may require the students to discover or create the relationships between them, and thence link them back to the guiding theme. Depending on the time frame, ideas for long-term projects/products are proposed, although resolution of the issue (emphasizing the affective component) might be achieved in the form of a debate or role play. At all times, the planner operates in keeping with the deeper goals that have been set for the class (e.g., development of a personal conscience, social awareness, awareness of differing perspectives) and with the linking of the various strands into the composite whole.

Unifying Elements in Planners' Strategies

The planning models employed by teachers of the gifted/talented highlighted numerous considerations, some of which were seen by them to be of greater importance than others. One aspect that complicated teachers' descriptions of their planning models was the fact that a significant proportion of their planning was not done preactively, but rather, was conducted cooperatively with the students in their charge. Similarly, teachers of the gifted/talented were oriented to modifying, revising, or completely eliminating their established plans if student response suggested the need to do so.

A brief description of each unifying element in the planning models employed by teachers of the gifted/talented is presented on the following pages.

Starting point. There was little unanimity among teachers of the gifted/talented as to the starting point for the planning process. Two respondents began by focusing on the global theme that had been identified for their particular grade level at the outset of the instructional year. This theme served either as an organizer for the unit or as an initiator for the generation of ideas suggested by the interface between the topic and the global theme.

Two other respondents opened up the topic with an exercise in mind-mapping--a form of divergent thinking--in order to generate as infinite a number of alternatives for study as possible. In one case, the respondent solicited student input into the exercise from the beginning for the express purpose of stimulating motivation and commitment in them. The other respondent preferred to engage in this exercise in isolation without the benefit of student involvment.

The remaining three respondents cited their own unique preferences for how they liked to begin planning. One respondent immediately turned to the appropriate provincial curriculum guides to assess the commonalities between the topic and the prescribed objectives. No attempt was made to specify the intended learning outcomes for the unit; rather, the aim was to merely identify what the guides had stipulated as "core curriculum" and what fell outside of that designation.

A second respondent within this latter group engaged in a teacher-research phase of planning as the starting point for the unit, especially if the area of study was new or unfamiliar. Here, it became crucial to establish in the mind of the planner what constituted the body of knowledge about the given topic and how it related to the perspective held by the students. Taking this research phase in a different direction, the final respondent chose to narrow the topic down initially, basing the decision on such factors as the availability of resources, teacher interest(s), or time constraints.

Use of objectives. All seven respondents expressed their reliance on the prescribed objectives set down in the curriculum guides, although how and when they were applied varied from respondent to respondent. For three respondents, the curriculum guides facilitated the planner's initial appraisal of what aspects of the topic were "core" curriculum and would thence be duplicated in the formal objectives stipulated for the unit further along in the planning process. Two other respondents used the curriculum guides to manage the intricacies of integration of the various subject areas within the parameters implied by global themes and instructional topics.

When the actual formulation of objectives for the unit was addressed, the respondents seemed to revert to purely idiosyncratic considerations. Objectives were formally stated within the stages of planning in only two instances and appeared to derive from preliminary attention to content and/or appropriate activities. For five respondents, objectives appeared to be considered in tandem with the content to be included for study and the activities suggested by the content; whether or not these considerations resulted in formally stated objectives was not made clear.

Again, where this phase of planning was incorporated into the whole planning process varied tremendously. In one instance, it resulted from the content that was generated by the students themselves and represented the planner's efforts to fit the input into the framework advocated by established curricular objectives. One respondent placed the objectives phase near the end of the planning sequence, just prior to establishing the time frame for the unit and making tentative decisions about student evaluation.

While it is not easy to generalize as to when objectives were considered, either formally or by implication, it is possible to state where they were not considered--at the beginning. Objectives for the unit tended to make an appearance after, or at least in conjunction with, the consideration of content and activities around which the unit was built.

Focus on content. The content for the unit seemed to be an important consideration for planners and was addressed early in the planning sequence with all seven respondents employing a variety of strategies. The teachers' conception of content seemed quite loosely defined, but fell within the parameters of "whatever it is you want the students to learn" (Zais, 1976). Two respondents consulted the appropriate curriculum guides to determine what content had been mandated by Alberta Education. From this it was possible to extend the curriculum beyond the "core", as dictated by the learning needs of the students, as well as appropriately "compact" the core curriculum to gain time for such extension.

Three respondents generated content in a brainstorming--divergent thinking--mode, although one respondent did so in isolation, one respondent engaged the students in the process, and one respondent utilized both alternatives in separate stages. In all three instances, once the widest range of ideas had been amassed, the respondents turned their attention to narrowing the field and/or establishing relationships among the concepts thereafter.

Content was considered in conjunction with objectives in the planning of five respondents. In all cases except one it was not clear whether objectives dictated the content or whether the reverse was true; one respondent seemed to work through both content and objectives simultaneously.

As an aside, three respondents noted that it was not possible for a teacher to be an "expert" in all curricular areas, although their students may be tremendously knowledgable in certain areas themselves. The alternative for them was to become expert in the methodological processes in which their students would be immersed and to be able to provide guidance, rather than leadership, during student inquiry.

Integration of subject areas. Six of the seven respondents showed significant regard for the need and value of developing a given topic or theme along the most broadly-based lines, integrating multiple disciplines to the optimum extent. This is entirely in keeping with current emphases in gifted education (Passow, 1982). Three respondents mentioned their reliance on the global theme as a means of focusing on the larger issues or problems within an area of study. Of these, two respondents made use of a clearly-stated issue as the vehicle for centering the students' attention on the content.

Tne orientation to integrating multiple subject areas appeared quite early in the planning process for these six respondents, although there was no unanimity as to what phase of planning it related to. Integration was addressed at a number of points: in conjunction with the selection of activities; in the course of narrowing down the topic; during the survey of the various curriculum guides; while content was being generated with the students; and after the objectives had been formulated.

Selection of activities. As might be expected, all seven respondents paid particular attention to the number and kinds of activities to incorporate into their unit. In all cases but one, this consideration was resolved in the latter half of the planning sequence.

Activities tended to evolve directly out of the content that was established for the unit, although the connection was not as direct in the planning of two respondents. In selecting their activities, planners were able to simultaneously attend to such necessary considerations as their use of AV and other resources, possible sequencing of activities, and current student interests.

A totally novel approach to the selection of activities involved one respondent's desire to allow the students themselves to determine the areas that they were motivated to pursue and, similarly, to establish their own inquiry process. Although all respondents gave indications that they operated with a high level of flexibility toward student preferences and to a greater or lesser degree incorporated that flexibility into their planning and subsequent teaching, this one respondent represented the extreme upper end of student-centred planning.

Mode of presentation. An interesting element that cropped up in the planning strategy of four respondents was the emphasis placed on the manner in which the unit was going to be presented to the students. Two basic alternatives were considered. Planners could opt for a teacher-directed approach to the study or for a student-directed approach; some combination of the two approaches presented a viable third alternative in certain cases. The decision to follow one alternative or the other hinged on the planner's appraisal of such considerations as the adequacy of resources for the unit, the level of difficulty of the area of study vis-a-vis student ability, the time available for the study, and the planner's level of expertise with the content. For example, the approach was more likely to be teacher-directed when the resources were inadequate in number, when some scaling down of the level of difficulty was warranted, and when there was a limited amount of time available to complete the study. Similarly, if the reverse of these situations was true, or if the planner's level of expertise was inadequate, then the approach was more likely to be student-directed.

The theme approach. In keeping with established orientations in gifted education (Kaplan, 1974; Passow, 1982), the use of a global theme to guide the curriculum planning of teachers and the subsequent learning of their students was an important element in the descriptions of three respondents, although all seven respondents stated their advocacy of its use at other points in the interview. Why it did not figure in the planning description of four respondents is curious; perhaps it was a function of the fact that the simulation was hypothetical and quite removed from the context in which they usually planned. Numerous statements were made which, directly or indirectly, supported the belief that the content of curricula for the gifted/talented should focus on and be organized with greater elaboration, complexity, and depth so that optimum integration of knowledge occurs across a broad spectrum of thought.

Reliance on resources. All seven respondents indicated their reliance on a wide range of resources upon which they depended for the effective presentation of their units of study, although two respondents did not identify a precise time or occasion in their planning strategy when this element was most significant.

Both in-class and out-of-class resources were considered, and they included print and non-print materials, field trips, AV, and human resources. The availability or suitability of resources had a direct bearing on such decisions as what topic or content to include in the study, what activities would be incorporated into the study, and whether the unit would be teacher-directed or student-centered. Similarly, when resources were deemed unsuitable or were simply not available, respondents were disposed to create their own. This typically involved drawing from a variety of sources and synthesizing these disparate parts into a workable whole. It was brought out in the statements of two respondents that the Academic Challenge Program was still in its formative stage, curriculum-wise, and consequently, teachers in the program were often obliged to engage in the creation of suitable materials on a regular basis.

Orientation to a time frame. Given the demands of an extensive provincial curriculum, there was considerable regard for time allocations in the course of the planning sequence. Four respondents attended to this element at different points in their planning procedures; in three instances, it served to limit the study by restricting the amount of content and/or the number of learning experiences that was feasible within a given period of time. In the fourth instance, it served as the organizer for the sequencing of activities making up the unit.

The fact that three teachers ignored this dimension in their planning could again reflect the hypothetical nature of the simulation.

Student evaluation (product). Student evaluation, in the form of a student-generated product--again, an important component of curricula for the gifted/talented (Renzulli, 1977)--figured prominently in the thinking and planning of all seven respondents in a variety of ways. Three respondents tended to exercise a degree of prescriptiveness concerning the product to be achieved by the students, and they had definite ideas as to what those products might be. Three other respondents evidenced more flexibility in allowing their evaluation strategies to flow naturally out of the activities in which the students were engaged, especially as the unit progressed and the activities became modified or redirected, as sometimes happened. The final respondent viewed the student product as a means of achieving a sense of closure by the students for the unit of study as well as an opportunity for the students to share what they had learned with each other and with the community at large.

Extent of preactive planning. The extent of preactive curriculum planning varied somewhat, but it was clear that plans were viewed as open-ended organisms capable of evolution and change. The extremes of variability ranged from one respondent who planned interactively with the students, although with certain preactive considerations in mind, to a second respondent who, rather tongue-in-cheek, explained how the entire unit might be planned preactively only to have it discarded in the face of emergent student response.

The remaining five respondents expressed orientations that picked up on elements of these extremes. As mentioned in the previous section, student input was valued, and it contributed to the final outcome of the planner's efforts. When the proposed study was presented to the students, at whatever stage of development that might be, it was with the understanding that certain aspects of the study would be negotiable.

Approaching this flexibility aspect of their planning from another direction, two respondents cited occasions when an event or interest arising spontaneously from the students initiated a very productive study. Feeling not at all threatened by this, they stressed the value of the learning derived from those impulsive occurrences.

Roles of the teacher and student. As was mentioned above, a significant proportion of the curriculum planning done by the respondents representing teachers of the gifted/talented was conducted interactively with the students themselves. While the respondents recognized their responsibility as instructional leaders and planners, they also tended to endorse the validity of student input into their own learning. Four respondents actively included their students in the formative stages of their curriculum planning, encouraging input into content, activities, modes of inquiry, and evaluation. As one respondent affirmed, such a policy had the spin-off benefits of enhanced student commitment, motivation, and performance.

Students were seen to play an active role as inquirers in and producers of knowledge, under the guidance of the "facilitator of learning"--a designation advocated by Story (1982)--who would aid the inquiry process and enable students to tap into audiences for their intellectual and creative productivity (Renzulli, 1982). Consistent with these expectations, the teacher's role was less dominant in these key areas and appeared to concentrate on supporting student endeavors rather than orchestrating them.

Other interesting elements. The use of brainstorming techniques was a unique feature of the planning of three respondents in this group. With it, planners were able to generate tremendous amounts of often seemingly unrelated content, with or without the involvement of their students, for possible study. This was of particular value in assisting the planner to integrate a number of subject areas or simply to extend the curriculum beyond that dictated by the provincial Program of Studies. This divergent phase was always followed by a period of convergence as the content was synthesized by the planner into a more manageable body of information or by the students in the course of their learning.

Teachers in the Regular Program

The planning models described by teachers in the regular program are also presented in summary form in the following section. The unifying elements that are reported in the subsequent section parallel the thirteen elements highlighted for teachers of the gifted/talented.

Descriptions of Planning Strategies

The descriptions of the typical planning strategies engaged in by teachers in the regular program follow.

Respondent R1. Planning begins with an assessment of the students' level of expertise with the topic, usually involving input from them. With that in hand, it becomes convenient to establish a time frame for the unit, eventually specifying the number of lessons to be included. Objectives/concepts are formulated, at least in general terms. All resources are listed, including those which might become activities within the unit (e.g., field trip sites). Possible skills for incorporation into the lessons/activities--from more than one subject area, if appropriate--as well as sequencing of the concepts to be covered (as identified by the objectives) follow. Actual refinement

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of specific lessons, introductory lesson, first lesson, second lesson, etc., according to concepts, skills, and resources, completes the process.

Respondent R2. The first step in planning is to list all of the content that is considered desirable or essential to the unit--a breakdown into knowledge and skill areas--eventually resulting in the formulation of objectives. Closely tied into the planning at this point is the consideration of a time frame for the unit. Perusing relevant resources in the library contributes other ideas for possible inclusion in the breakdown. A more comprehensive scrutiny for various print and non-print resources gives the teacher an indication of the kinds of learning experiences to which the unit will lend itself. Organizational decisions concerning grouping strategies, student projects, specific activities and the sequence to be followed are randomly made, essentially in the order in which they occur to the planner--not necessarily in any order of importance. Modes of evaluation are at least tentatively formulated. The final phase of the planning process consists of a refining of the activities, again in a random fashion.

Respondent R3. To begin planning, a narrowing down of a general topic (like ecology) to a more specific, manageable topic is indicated. Objectives are implied by a listing of the concepts and possible sub-concepts to be covered in the unit. These concepts are then set out in a logical order, representing the planner's perception of the progression of the students' understanding of these concepts. Specific activities which might convey these understandings to the students are suggested, with attention to variety and their interest to the students. Establishing a succession of evaluative instruments to assess students' grasp of each concept in the sequence completes the planning process.

Respondent R4. The first step in planning a unit is the clear formulation of the goals/objectives for that unit. The processes involved in meeting those objectives--library research, field trips--are next considered. From there it becomes possible to adequately assess the materials at hand in terms of their applicability to the stated goals. The available/suitable materials are then transformed into the kinds of learnings that will meet the goals of the unit.

Respondent R5. Formulating the objectives and incorporating any number of subject areas that are appropriate to the topic of study--as dictated by the Program of Studies--begins the planning process. This might involve concurrent assessment of the students' level of need/expertise in order to identify those objectives which must be emphasized versus those which might be non-essential at the present time. An exploration of available resources, be they print, non-print, human, extra-school locations, etc., follows next. With the objectives and resources in mind, the objectives are then organized into logical groupings from which specific learning activities suggest themselves.

The activities, in turn, would be modified and/or adapted to render them appropriate to the intellectual and social limitations of the group. Finally, the activities are refined to the level of detail approximating lesson plans.

Respondent R6. After an initial period of upgrading one's knowledge base, planning begins with the formulation of a set of objectives on a narrowly defined theme, e.g., the pond. Included in these objectives are considerations of the degree and kind of integration of various subject areas that would be appropriate to the study. Content is specified. Resources that will assist in developing the content and/or meeting the objectives of the unit are listed. With this much in hand, the students themselves are probed for the purpose of assessing their level of familiarity and expertise with the topic, and areas of need are identified, both in terms of knowledge and skills. This input is necessary for the subsequent design of the activities and lessons in which the students will be engaged.

Unifying Elements in Planners' Strategies

A brief description of each unifying element in the planning models of teachers in the regular program is presented below. To facilitate comparison with the findings recorded in the previous section concerning teachers of the gifted/talented, identical sub-headings have been used.

Starting point. Respondents in the regular program initiated their planning strategies in a variety of ways. Two respondents considered the necessity of establishing an instructional direction for their unit in the form of goals and objectives derived from the provincial Program of Studies. In the estimation of one respondent, it was difficult to plan the means to an end if the end was not clearly identified first.

Narrowing the topic was the first step for two other respondents, one of whom achieved this as a result of a period of independent research into the larger topic. The second respondent argued for a paring down of the topic on the basis of feasibility and manageability for the planner and, subsequently, for the students.

A fifth respondent opted to generate the content for the unit of study as the logical starting point in planning. In this case, content included specification of both the knowledge and skill components and ultimately, resulted in the formulation of objectives. A period of student diagnosis constituted the starting point for the final respondent in the group. Students were encouraged to supply information to the planner that would indicate their level of knowledge or expertise with the topic from which the planner could begin to plan with due satisfaction regarding the appropriateness of the study.

Use of objectives. All six respondents stated their endorsement of the use of objectives in planning their units of study, although only two of them referred specifically to the provincial curriculum guides or the Program of Studies. In all cases, the formulation of objectives emerged very early in the planning sequence and always preceded any consideration of content (except in two cases where it ran concurrently), resources, activities, or evaluation.

Two of the respondents described the objectives stage of planning as a two-step process involving the identification of objectives first, followed immediately or soon after by an organizing, or sequencing, stage of these identified objectives.

Focus on content. Content, specifying the knowledge and skill components to be included in the unit, was cited overtly by three respondents. In all cases, it represented the planners' assessment of what ought to be included in the unit of study, based on personal preference--including teacher interests, areas of teacher expertise, or simply what was perceived by the planner to be "valuable"--as well as consideration of the knowledge base itself. For two respondents, content dictated the objectives, while for the third the reverse was true.

It is entirely possible that content was implied, rather than specified, by the remaining three respondents in their consideration of the related areas of resources and activities. However, this was not clearly stated and represents a high degree of conjecture on the part of the researcher.

Integration of subject areas. Attention to the integration of two or more subject areas was indicated by three respondents who, nevertheless, approached its incorporation into their planning in diverse ways. One respondent selected objectives from the Program of Studies with careful consideration to their usefulness across a number of subject disciplines. A second respondent approached integration from the opposite end, drawing on those subject areas which would best facilitate the meeting of pre-determined objectives.

The final respondent emphasized integration while activities were being generated well along in the planning sequence. To illustrate this strategy, the respondent suggested activities which seemed to be appropriate to a given study and, once they were in place, identified the subject area or areas it satisfied. The end result was perhaps more piecemeal and less thorough than the integration described above, but nevertheless, it did create a partial blurring of the boundaries between individual subject areas.

Selection of activities. All six respondents paid due consideration to the number and kinds of activities to include in their unit of study. In all cases, the activities were selected after the objectives, content, and resources had been determined. Four of the six respondents proceeded to a refinement stage immediately following the selection of activities. Refinement included organizational and instructional decisions such as sequencing, grouping, integration (mentioned above), and the minutiae of lesson planning (e.g., page numbers, specific AV).

Mode of presentation. All descriptions of planning strategies indicated that the preferred mode of presentation for the six respondents in the regular program was the teacher-directed approach. This is not to say, however, that they did not vary their presentation as suggested by the activities themselves. Planners seemed to be oriented toward a variety of groupings as well as a combination of teacher-led and student-centered approaches as the situation dictated.

The theme approach. Only one respondent of the six stated overtly that the use of a theme was central to planning for the unit. For this respondent, the theme constituted the vehicle through which optimum integration of the subject areas was attained.

The remaining five respondents may have been using the terms "theme" and "topic" interchangeably since they too maintained a focus on the topic of Ecology, or a narrowed-down aspect thereof, as they fabricated their unit plan. However, this was not stated as such by any of those five respondents.

Reliance on resources. Resources figured prominently in the planning strategies of five of the six respondents. The range of resources cited extended from print and non-print materials, AV, out-of-school sites, and human resources. In all five cases, the selection of activities appeared to be dependent on the availability and suitability of the resources known to the planner.

Two respondents injected a phase of planning between their search for resources and their selection of activities, rendering the connection less direct. One respondent sequenced the objectives for the unit on the basis of the materials selected, while the second respondent opted for a phase of student diagnosis dictated by the resources prior to the final selection of activities.

A survey of the available resources produced a variety of effects. Respondents were motivated to add content suggested by the resource materials and include activities for which resources were available; similarly, content and activities were often omitted when resources were lacking. One respondent, however, indicated a personal commitment to the creation of materials for the unit of study on a regular basis when such materials were unattainable by any other means.

Orientation to a time frame. Two respondents made direct mention of the need to establish a time frame for their unit. This decision was made very early in the planning sequence and served as a framework upon which subsequent decisions concerning objectives, content, and activities could be founded. In one instance, the time frame was established when the gap between what students knew and what they needed to know had been identified. The second respondent first determined the content for the unit before establishing what period of time was necessary for its coverage.

In their desire to limit the topic for the unit plan to a more manageable size, two other respondents implied, but did not state, their awareness of the constraints imposed upon them by the finite amount of time available to them to meet the requirements of the Program of Studies.

Student evaluation (product). Student evaluation was mentioned by only two of the six respondents as an actual stage of planning. For one respondent, decisions about possible evaluation strategies flowed naturally out of the activities included in the unit as well as from personal expectations of the students. Formal and informal evaluative tools were at least tentatively suggested and, in some instances, were firmly installed at logical points in the evolving unit.

The second respondent incorporated a cycle of formative evaluation through which it was possible to assess student progress in an ongoing manner. The decision to conduct this evaluative strategy was made during the actual planning, although the actual evaluative tools were not necessarily determined at the same time.

The manner and frequency of evaluation was left to the discretion of the planners, based on criteria established by them.

Extent of preactive planning. Without exception, all six respondents completed the process of unit planning preactively, although considerations of student evaluation were not addressed by four respondents. Whether or not this latter consideration would have been resolved at some point as the unit progressed is open to speculation.

As their final stage of planning, four respondents made reference to a period of refinement of the unit's activities to the level of detailed lesson plans. This degree of specificity is a strong indicator that the unit plan was fairly completely developed by the time it was ready to be presented to the students in the instructional setting.

Roles of the teacher and student. All six respondents appeared to accept their role as instructional leaders and planners and operated on that basis. All planning decisions concerning content, processes, activities, and evaluation were made by them, usually preactively. However, three respondents stressed the efficacy of engaging in some form of student diagnosis in facilitating their subsequent decision making.

Owing to their lack of involvement in this planning process, it is safe to assume that the role of students is typically passive.

Other interesting elements. Four respondents included one or more refinement steps in their planning sequence, which amounted to a stage of "fine-tuning" the major features of the new unit using detailed lesson plans or ideas for specific lessons. This refinement stage included the making of specific organizational decisions, such as grouping, ordering of AV materials, and so on.

Comparison of the Two Groups of Teachers

As mentioned in the introduction to this section on teachers' planning models, the curriculum planning engaged in by teachers of the gifted/talented and teachers in the regular program was a highly idiosyncratic process. Although all thirteen respondents attended to essentially the same kinds of considerations in the course of their planning, the manner and order in which they were addressed was seen to be primarily a function of each individual planner's personal preference. However, there were numerous similarities, or areas of commonality, running through the study sample, both within each respondent group as well as across the two groups. Important differences were also in evidence.

Discussion of these findings will focus initially on the similarities within each respondent group, beginning with teachers of the gifted/talented. This will be followed by a discussion of the similarities and differences between the two groups.

Teachers of the Gifted/Talented

Some very interesting areas of commonality were noted among teachers of the gifted/talented. Without exception, these areas were entirely consistent with current emphases in education for the gifted/talented, and many features seemed to be directly related to the nature and needs of these students.

The limited extent to which the respondents carried their preactive curriculum planning is noteworthy, insofar as flexibility and open-endedness were seen to be desirable given the nature and varied interests and abilities of gifted learners. While a certain amount of variability existed in terms of how far the preactive planning was carried, there is no doubt that teachers of the gifted/talented were cognizant of the pitfalls inherent in over-planning.

The ability and, perhaps more significantly, the willingness to be so sensitive to the emergent desires and interests of their students was abundantly apparent. Student input was obviously solicited and acted upon to a large degree.

Another feature consonant with, and in some ways supporting, the statements regarding the extent to which teachers planned preactively was the apparent realignment of the roles assumed by teachers and students in the learning process. Given the extensive reliance on interactive planning with the students on the part of the planners in this group, it is clearly indicated that the role of teacher as leader and the student as passive follower had undergone a major shift. Quite clearly, the teacher had assumed a less dominant role in favor of a role that is supportive and facilitative; at the same time, students had been encouraged to take a more active role in the formative decisions surrounding their learning. In addition, students had been steered toward the overt production of new thought and form and away from the passive consumption of knowledge.

Adherence to the use of a global theme and, in a related sense, emphasis on multidisciplinary integration of knowledge are important features of education for the gifted/talented (Kaplan, 1974; Passow, 1982), and all seven respondents demonstrated their familiarity with the thinking of these, and other, leaders in education for the gifted/talented. These features were consequently of considerable importance in the planning strategies of the respondents in this group. Their use as organizers for the unit and facilitators of the generation of content has been previously mentioned.

Perhaps due to this focus on global themes and integration, teachers of the gifted/talented seemed to be oriented to a broad view of the role of knowledge in their planning. Although they were given to engaging in the locating and assembling of learning resources, emphasis seemed to be placed on its availability and suitability for the independent inquiry of the students rather than on arranging it into some contrived framework for their use. It was left to the students, then, to seek and use the available knowledge/resources as their inquiry dictated.

The role of objectives in planning was given due consideration, but seemingly after other considerations had been resolved. This does not diminish their importance for planning, but does indicate their priority within the planning process. Obviously, teachers of the gifted/talented were motivated to make certain decisions--regarding "core curriculum", integration, relation to the global theme--before specific objectives for the unit could be formulated.

Teachers in the Regular Program

Certain features of the planning of teachers in the regular program stand out for further examination.

It has been noted that teachers in the regular program were motivated to convey their preactive planning to its logical, if somewhat prescriptive, conclusion. This was clearly indicated by the fact that the hypothetical unit plans were thoroughly developed down to the minutiae of individual lessons. Knowing the end from the beginning is one of many advantages of planning to this degree.

There were strong indications that teachers in this group assumed the role of instructional leaders and planners with all seriousness. Consequently, both preactive planning and the intended instructional interaction were predominantly teacher-oriented. This does not imply that the needs of students were relegated to some secondary consideration; the emphasis placed on student diagnosis and, to a lesser extent, regular student evaluation belies that notion. Nevertheless, the teacher was the administrator/orchestrator of the curriculum for a largely passive audience of information consumers.

Resources were seen to be an important element for consideration by the planner, especially in terms of their availability. With the possible exception of one respondent, the availability and suitability of resource material was a major determinant in whether or not a given topic was even considered, and it clearly had an influence on the direction the subsequent study took.

If any blanket statement can be made given the extremely idiosyncratic behaviors demonstrated by planners in either group, it can be stated that the planning models employed by teachers in the regular program approximate, but do not strictly follow, the Tylerian model for curriculum planning.

Areas of Commonality Between the Two Respondent Groups

In general, teachers of the gifted/talented and teachers in the regular program tended to address many of the same kinds of considerations in the course of their curriculum planning. In addition, there were some areas of lesser overlap between the two groups. Occasionally, a given feature in the planning of one group might be a feature of the planning of one or more respondents in the second group, as in the use of integration noted elsewhere.

Teachers in both respondent groups were usually alike in their consideration of the necessary elements of planning, including objectives, content, activities, resources and, to a lesser extent, evaluation. This is not to say that they approached or resolved these considerations in similar fashion. Reversion to purely idiosyncratic behaviors is the norm in this respect.

Differences Between the Two Respondent Groups

In assessing the differences between the planning models employed by teachers of the gifted/talented and by teachers in the regular program, it might be helpful to consider, first of all, a comparison of two general models of learning and instruction described by Renzulli (1982). While neither of the respondent groups can be said to fall entirely within either of the general models, a closer scrutiny will serve to establish a perspective upon which to base the comparison of the two respondent groups.

The two learning/instructional models, A and B, presented in Figure 4 approximate the major principles and practices that Renzulli (1982) feels have guided the planning practices of teachers in the regular program and those in programs for the gifted, respectively. One is not meant to be compared to the detraction of the other;

Figure 4: A comparison of two general models of learning and instruction

Learning/Instructional Model A	Learning/Instructional Model B
The Role of the Student	
The Four-P Approach: prescribed, presented, predetermined pathways, predetermined products	Student selection of topic(s) guaranteed
Didactic or instructive in design	Inductive or investigative in design
Student's role is that of learner of lessons and doer of exercises	Student's role is that of first-hand inquirer
Student is consumer of content and process	Student is producer of knowledge and art
The Role of Knowledge	
Linear sequential processing of information	Cyclical and frequently simultaneous processing of information
Knowledge is accumulated and stored for (possible) future use	Knowledge is only sought when needed for present use
Students use knowledge to study about problems	Students use knowledge to act upon problems
Teacher/textbook predetermines what information will be used	Needed information is determined by the problem as it unfolds

The Role of Creativity and Discovery Learning	
Situational creativity	Real creativity
Predetermined discovery	Real discovery

The Role of the Teacher	
Administers curriculum	Methodological assistant
Orchestrates exercises	Managerial assistant
"Pseudo-expert" in most curricular areas	"Expert" in the above two activities
Provides "school house" evaluation	Helps student seek real audience evaluation

instead, it ought to be clear that each model has its strengths and its place in the educational system. It is possible, nevertheless, to immediately perceive the differences depicted by each model, and its applicability to the current discussion of the differences between the planning models of teachers of the gifted/talented and those of teachers in the regular program should be evident.

It has been noted that teachers of the gifted/talented appear to plan less extensively, in preactive terms, than do teachers in the regular program. When considering the role of knowledge and the role of creativity and discovery learning advocated by learning/instructional model B (the gifted program), their motivation becomes clear. Though the teachers of the gifted/talented did not carry their efforts to the extent indicated by the model, a definite orientation in that direction was demonstrated. Plainly, if students are to engage in real discovery, seeking and using only the information that is pertinent to the problem at hand, then planners cannot plan to the degree usually prescribed in the regular program. A recursive pattern of information gathering and processing is desirable and can only be achieved by an open-endedness in planning on the part of the teacher.

Apparent differences in the roles of teachers and students in their respective programs are also seen in a clearer light when the appropriate categories from Figure 4 are compared. As demonstrated by their descriptions of their approaches to curriculum planning, teachers of the gifted/talented are much more inclined to solicit and utilize direct input from their students regarding content, activities, and evaluation than is usual in the regular program. This is even more true when it is recalled that students have initiated learning experiences from spontaneous events that have occurred in the classroom.

Again, while the respondents among the teachers of the gifted/talented cannot be said to operate exclusively in accordance with these specifications, nevertheless it is sufficiently exhibited in their planning descriptions to conclude that, at the very least, teachers of the gifted/talented are oriented to that ideal. Wherever possible, students are encouraged to adopt an investigative stance and to engage in exploring knowledge with the support and guidance, but not the direction, of the teacher. The oft-coined phrase "facilitator of learning" is the operative designation that applies to this supporting role taken by the teacher.

For their part, students are expected to produce original knowledge and/or art, and again, teachers in this group aimed toward that goal, with varying degrees of prescriptiveness, in the course of their planning. All seven respondents among the teachers of the gifted/talented paid particular attention, not to what their students would "consume," but to what they would produce.

While the relationship is less direct, the role of knowledge as it is presented in Model B is consistent with two other important elements in the planning of teachers of the gifted/talented. The strong emphasis on the use of a global theme and of integration of the subject areas that characterized the curriculum planning of these teachers had no match among teachers in the regular program, with one exception in the area of integration. Apart from that one respondent, there was little regard for the routine use of integrative strategies among teachers in the regular program. And, of course, the use of a global theme to guide and/or stimulate planning has never been a feature of the regular program, so its absence from the planning descriptions of teachers in this group is understandable. In one final area, teachers of the gifted/talented reported a greater sense of awareness of the constraints imposed by the limited amount of time available to them to meet the provincial curricular requirements and the extension/differentiation needs of their gifted students. This was obviously a planning decision that teachers in the regular program did not feel as acutely, although one supposes that the pressure to complete the curriculum mounts as the year progresses.

Conclusions

1. The curriculum planning of teachers would seem to be highly idiosyncratic and does not strictly follow the classical Tylerian model of curriculum planning although all the elements of that model are present. The planning of teachers of the gifted/talented contains a number of different elements from that of teachers in the regular program, most notably in terms of the level of student input into their planning, and in the use of a global theme to stimulate and organize their thinking while planning.

2. Teachers of the gifted/talented appear to engage in less

preactive planning than do teachers in the regular program and were much more predisposed to adapt, revise, or abandon their own plans in favor of the emergent needs and interests of their students. Teachers in the regular program were more prone to refine their plans to the level of specific ideas for lessons, with little or no room for negotiation.

3. A realignment in the traditional roles of teacher and student in the program for the gifted/talented is evident. In keeping with current orientations in education for the gifted, students have assumed a more assertive, participative role in their learning, with a commensurate reduction in the traditional dominance of the teacher. The teacher's role has become more supportive and facilitative, and far less overtly orchestrative in an environment that is noticably student-centered.

4. Teachers of the gifted/talented placed much greater emphasis on the use of a global theme and on multi-disciplinary integration as organizers and stimulators of planning. The global theme concept is not part of the regular program at all and, although there was some evidence of the use of integration among teachers in the regular program, generally speaking integration was not a motivating factor in their planning.

5. Teachers of the gifted/talented appeared to place greater importance on the constraints imposed on them by the availability of

time, both to plan and to instruct.

Qualifying Remarks Concerning Teachers' Planning Models

Having described their planning models in some detail, respondents in both groups were asked a follow-up question to verify that the planning strategy described by each respondent was, in fact, typical of the unit planning that was done under usual circumstances. The wording of the question--Would you say that this planning endeavor you have just described to me is typical of the planning in which you normally engage?--allowed respondents to supply that verification and also afforded them an opportunity to qualify any of the statements they had previously made.

Teachers of the Gifted/Talented

All seven respondents affirmed that their planning description was indeed typical of the planning they normally did. Of these, five supplemented their affirmation with interesting qualifying remarks which were, of course, limited to their own unique planning strategy.

Ideally, stated one respondent, the planning model described is the approach to strive for. In actual fact, however, the reality of the classroom and the students sometimes dictated otherwise. In the past, plans had failed utterly when taken to the students, and some events had arisen spontanteously in the classroom in ways the teacher had not anticipated. When this happened, it was incumbent on the teacher to be responsive to these events and to be prepared to rework and refabricate what had evolved naturally into the long-term instructional view. The respondent felt it was desirable to give the students a sense of ownership and power in their learning by allowing them to contribute to the decision making process in meaningful ways. There was an element of negotiation involved in planning with gifted students, with all the attendant advantages and disadvantages.

A second respondent expressed concern over the lack of time available for planning in a way that planning ought to be approached; there was a sense of doing what one could, but feeling as though it was never enough. When it was not practicable to give every subject area its due, trade-offs in planning took effect, with possible negative consequences.

It was asserted by two other respondents that the description of their planning models was currently typical; however, their styles had not crystalized as yet, but were undergoing a gradual evolution as they gained experience and confidence with their assignment in the Academic Challenge Program. A period of involvement in curriculum planning at the district level had been instrumental in one respondent's growth in planning competence. The second respondent confided that the present mode of planning was under revision and refinement.

The fifth respondent expressed a need to differentiate between the type of planning that was done for original, teacher-created units versus the type of planning involved when using pre-packaged units. The latter units required far less decision making on the part of the planner, especially as regards resource material. Most teachers, it was felt, tended to incorporate both types of plans into their instructional year.

Teachers in the Regular Program

Five of the six respondents in this group affirmed that their planning descriptions were representative of their usual planning efforts. Three respondents were moved to qualify their affirmations.

One respondent felt that the planning model described was typical of approximately three to four units in any given year, simply because the time and energy was not available to plan a new unit every year in every subject area. However, it was stated that previous units had undergone the same planning procedure; these units merely required occasional revision and updating.

The planning model described was a very simplified and condensed version of what actually transpired, stated a second respondent, noting that it was also important to bear in mind that much of what had been described was not usually brought to the conscious level. The implication was that many planning decisions are made on a more routinized level of operation (Yinger, 1980).

The sixth respondent, mentioned as having answered in the negative, pointed out that the planning model described had, in fact, been hypothetical since primary reliance was made on pre-packaged units. These units eliminated much of the guesswork and energy needed for teacher-constructed material.

Comparison of the Two Groups of Teachers

The reliability of the respondents' statements regarding their planning models appears quite certain, given their subsequent confirmations after the fact. Of thirteen respondents, twelve verified that the planning models which they had described were typical of the planning process in which they normally engaged when putting together unit plans. Their qualifying remarks served to highlight those occasions when their typical planning models were less stringently followed, such as when pre-packaged units were utilized, or when they were simply making revisions to previously planned units.

For teachers of the gifted/talented, there was a tendency to veer from preferred planning models for reasons related to a desire to respond positively to the nature of gifted/talented students, to practical considerations, and to the relative newness of the Academic Challenge Program itself. Having established that gifted/talented students assume a more active, informed role in determining what they will learn and by what means they will learn it, it is perhaps understandable to find a planner operating sensitively and responsively to those wishes.

Given the extreme demands placed on teachers in the Academic Challenge Program, it is also conceivable that time and energy constraints might have an impact on the scope of planning. A respondent in the regular program expressed similar views concerning the frustrations of a monumental task and too little time to accomplish it.

The fact that the Academic Challenge Program is of relatively recent origin, and hence teachers operating within the program have been newly recruited, provides ample explanation for the learning mode under which the teachers perceive themselves to be operating. With a maximum of three years' experience working with Academic Challenge students--and sometimes less than that--several respondents felt that they had much to learn about planning for the gifted, not to mention many other facets of education for this special needs group. As experience and confidence grows, it is likely that teachers' planning models will become more firmly established and/or routinized.

Conclusions

1. While all respondents (with one exception) tended to subscribe to a preferred planning model, there are occasions when digressions from the norm were warranted. Because their students were more centrally involved in the planning process, teachers of the gifted/talented were more responsive to the wishes of their students.

2. There were limits placed, by respondents in both groups, on the time and energy that was possible to expend on the type of planning illustrated by the teachers' planning models. For practical reasons, there was considerable reliance placed on pre-planned units, although for teachers of the gifted/talented the need to differentiate the curriculum precluded this reliance on outside resources.

3. Owing to the relative newness of the Academic Challenge Program, there was a tendency among teachers of the gifted/talented to view themselves in a learning mode with respect to their curriculum planning for this special needs group. Until more experience is gained in working with these children, it is likely that their curriculum planning models will continue to evolve.

Factors Influencing Curriculum Planning by Teachers

This final section presents findings related to factors that influence the curriculum planning of teachers. To allow the respondents to make the transition from describing their planning models to that of describing influences on their planning, they were first asked to assess their perceived degree of freedom to make curricular decisions about what the students in their class would learn. (See question 10, Interview Guide, Appendix B.)

The respondents were then given a list of twenty-five items representing the major factors suggested by the literature (e.g., Clark & Yinger, 1980; Jeffares, 1973; Pylypiw, 1974; Shavelson & Stern, 1981) as influencing the decisions made by teachers in the course of their curriculum planning (see Appendix C). These items were grouped into four categories: factors related to the teacher/planner, factors related to the students, factors related to the curriculum, and factors related to the learning environment.

Respondents were asked to rate each item in the list on a scale of 1 to 5 (5 being greatest) as to the degree to which it influenced their thinking and decision making while planning. (See question 11, Interview Guide, Appendix B). To ensure that teachers' responses would not be limited to those items contained in the list and to allow for possible additions to the list, one item in each category was left open-ended. When the ratings had been completed, the respondents were given an opportunity to comment on the values they had assigned to each item and to suggest how each item might influence their planning decisions.

The responses to the two questions making up the Teacher Opinionnaire are presented in the next section.

Freedom to Make Curricular Decisions

Teachers of the gifted/talented were unanimous in their assertion that there was a high degree of freedom to make curricular decisions for their students. At the same time, however, there was recognition of the fact that Alberta Education had mandated a curriculum for the province, and all seven respondents affirmed their commitment to carrying out that mandate. One respondent seemed to summarize the feelings of the group in a statement that reflected both this sense of commitment and also a sense of appreciation for the opportunities attendant on curriculum planning for the Academic Challenge Program.

> "I feel very free to [make curricular decisions for the students]. You know, I do have a commitment to Alberta Ed, I guess, simply because we now have an exam system, so therefore I am very aware that I would never want to disadvantage children as

far as, you know, I'll do a little content that way. Outside of that constraint placed, I guess, by the fact that there are those exams there, I feel very free to do what I will with a unit study. In the Academic Challenge class, it's...because basic material is covered so quickly and efficiently, you have a lot more freedom than in [the regular classroom]. You simply move along through what you feel are sort of the basic concepts and move to the higher level thinking and products that are creative and innovative and away you go. In that respect, I totally enjoy the, just the time."

Associated with their statements of freedom were comments alluding to the sense of responsibility they felt to make reasonable decisions. This responsibility and attendant concerns were well stated by a second respondent.

"The decisions that I make, I try very hard to look at them from a variety of perspectives and to make a reasonable call and so I feel that the safeguards that I believe need to be there, I try to impose myself and I try to be responsible about the choices that I make. And I don't make any bones about being super-teacher or anything, so I don't promise that I can deliver things either. I just say that these are the things that I'm going to try to do. And I feel that I'm given quite a bit of freedom to do that in this situation [one of strong parental and administrative support]. Given another situation, I probably would not. It depends on the individuals that are reacting with you and how well they would know me, and whether or not they

> would give me a long leash. I function better with a long leash, but I wouldn't blame somebody for not wanting to give it to me either."

Speaking along these same lines, other respondents noted the need to cover the core curriculum--in compacted form--thereby providing their students with the content received by that grade level in the regular program, as well as to extend the curriculum to the degree appropriate for them. The core curriculum was viewed as a starting point for further development along lines suggested by the needs and characteristics of their students and, given the newness of the Academic Challenge Program, that development had evolved with few restrictions.

Teachers in the regular program expressed a greater range of responses to the degree of freedom felt in making curricular decisions. The spectrum included "fairly restricted" to "totally free, within certain guidelines," with other sentiments falling between those extremes. Essentially, respondents felt that the requirements of the curriculum were dictated to them, but how they chose to meet those requirements was left to their discretion.

> "There's many, many routes to get to the objective that you're after. And it depends on what you have access to in your school setting, or you personally, as a planner. And so, in one section of it, I feel that, you know, I'm obliged to restrain part of my planning to a block of ideas that have been established already, and then the means are left to me, and that's a different type of organizing, different type of planning that I do."

Certain subject areas, like Mathematics and Science, were seen to be more prescriptive and less open to interpretation on the part of the planner than others, especially Social Studies. Nevertheless, one respondent felt bound to "adjust" the curriculum in such a way that it could be more meaningful to the students.

Both the teachers of the gifted/talented and teachers in the regular program, then, considered the constraints imposed on them by a mandated curriculum. However, they were equally cognizant of the opportunities presented by the planning that was left to them. Teachers of the gifted/talented were more inclined to take the opportunity to extend the content to be covered beyond the mandate, whereas teachers in the regular program concentrated more on how to teach the content that had been prescribed. The desire to get the most out of the curriculum was keenly felt. As one respondent indicated, "...it's just a matter of time. I mean, we probably..., our ambitions are greater than the time and the facilities that we have to put them into operation."

Influences on Planning: An Initial Look

The Teacher Opinionnaire was administered to the respondents in both groups with careful attention to establishing a context for their responses. It followed immediately upon the planning simulation in order to take advantage of the conscious-level thinking that had been stimulated by that task. It was hoped that, in reviewing their planning process, respondents would be more attuned to the attendant decision making processes involved in planning. Similarly, it was thought that their recall of those processes would transfer more readily to their completion of the opinionnaire.

Respondents were directed to focus their attention on the decisions made during their usual preactive planning sessions and to attach a relative weighting to each influence that had some bearing on the decisions they made while engaged in curriculum planning. The ratings given were to be applied as spontaneously as possible, thereby increasing the authenticity of the respondents' reactions to the items. It was felt that too much time spent per item would decrease authenticity by allowing each respondent to consider how they "ought" to rate the items.

The ratings to be attached ranged from a low of 1--indicating no impact whatsoever--to a high of 5--suggesting great impact. The results of the opinionnaire are reported in Table 2. The number of responses recorded by respondents in each group have been totalled separately under each of the five numerical headings or response categories, but have been juxtaposed for ready comparison. The total number of responses in each response category for teachers of the gifted/talented are reported first, in front of the slash (/), while the second number gives the totals for teachers in the regular program.

Once the totals for the two groups were tabulated for each item under the five categories of response, several interesting findings were detected. Rating 5 was surveyed first since it highlighted those factors which had the greatest impact on curriculum planning. Factors which registered discrepant emphasis between the two groups of

Table 2 Summary of Responses, Teacher Opinionnaire/Rating Scale

	Degree of Influence				
	1 Not at all	2 Minimal	3 Moderate	4 Considerable	5 Great
	G/R	G/R	G/R	G/R	G/R
1. Factors Related to the Teacher/Planner					
a) past experience			1/0	4/3	2/2
b) personality		0/1	4/1	1/2	2/2
c) repertoire of skills/strategies			0/1	6/2	1/3
d) values and beliefs		1/1	1/2	2/1	3/2
e) knowledge of subject matter			3/2	3/4	1/0
f) other factors/planner		1/0	1/3		2/0
2. Factors Related to the Students					
a) student ability			0/2	2/3	5/1
b) student talent		0/1	0/1	6/3	1/1
c) social-emotional readiness		0/1	1/0	1/5	5/0
d) student behavior	0/1	1/0	2/3	3/1	1/1
e) intellectual, etc, needs		0/1		1/4	6/1
f) students' interests		0/1	0/3	5/1	2/1
g) other factors/students		0/1	1/2	2/0	1/0

	Degree of Influence				
	1 Not at all	2 Minimal	3 Moderate	4 Considerable	5 Great
	G/R	G/R	G/R	G/R	G/R
3. Factors Related to the Curriculum					
a) subject matter itself		0/1	2/2	2/2	3/1
b) curriculum guide/objectives			3/0	3/4	1/2
c) availability of resources			2/3	3/1	2/2
d) current issues			2/4	2/2	3/0
e) integration/other subjects		0/2	1/1	3/2	3/1
f) other factors/curriculum		0/1	2/2	1/0	1/0
4. Factors Related to the Learning Environment					
a) class size	0/1	1/0	4/2	1/2	1/1
b) classroom organization		2/1	2/1	3/3	0/1
c) time			2/2	4/3	1/1
d) principal;teachers;parents	0/1	4/3	1/1	1/1	1/0
e) accountability system		0/1	4/1	3/3	0/1
f) other/school environment		0/1	1/1	2/1	1/0

N.B. G = Teachers of the Gifted/Talented
R = Teachers in the Regular Program

respondents were seen to require closer examination. In three items, it was immediately apparent that teachers of the gifted/talented placed stronger emphasis on these factors than did teachers in the regular program. Possible reasons for these discrepant values were suggested by the comments made by respondents in both groups regarding the impact of each factor on their decision making while planning.

Factors Related to the Students

Three items--all found among the factors related to the students--that bore closer scrutiny were student ability, social-emotional readiness of students, and students' intellectual, social, and skill needs. In all three instances, these factors had greater influence on the planning decisions made by teachers of the gifted/talented.

In the area of student ability, teachers of the gifted/talented expressed considerable unanimity of intent in placing their students in a priority position with respect to the program they were conducting. One respondent made this position very clear.

> "The students' abilities...play a big role in what I do with them because I feel that the kids come first, and the program comes second, and you're here to teach the kids, not the program. The program has a lot of merit and there's a lot of important parts to it, but you can't sort of--I don't feel that I could--freight train through for the sake of the curriculum. Sometimes I feel the constraints of time and those kinds of things...but I try to

> take somebody where they're at and get them to grow further, regardless of how far that growth might come. Then as long as the pupil is growing, I feel that that's kind of what I'm there for. However, I recognize that there are standards and limitations on that, too, so I have to try and accommodate both sides."

There was strong affirmation that it was incumbent on the teacher/planner to have a solid grasp of the strengths and weaknesses of the class, both collectively and individually, in order to make effective decisions regarding such imperatives as activities, evaluation, pacing, expectations and teaching strategies of the appropriate orientation and kind. The aspect of challenge without frustration for the students appeared repeatedly in their comments in this area.

At first glance, the comments made by teachers in the regular program appeared to endorse similar notions of student ability, though their assessment of its impact on their planning was considerably lower. This group, too, relied on their appraisal of the ability level of their students to provide the justification for making decisions about activities, teaching strategies, pacing, and materials suitable for them.

There was no indication that this assessment was done at any other than the collective level, however, and this may explain the lesser emphasis placed on student ability. The assessment of student ability was undertaken, as one respondent phrased it, to find "the middle road" between the extremes of heterogeneity traditionally found in regular classrooms. Planning decisions were then made to approximate that mean, with efforts made to remediate or enrich the extreme ends of the continuum of ability represented in the class.

This is not to say that teachers in the regular program operated exclusively on the collective level, while teachers of the gifted/talented were exclusively motivated to individualize their planning for their students. One respondent in the regular program affirmed the need to allow for student differences in a heterogeneous group, but it was something that was simply done and not necessarily planned for. A second respondent in the same group described a personal orientation to work with certain students on a "contract" basis. These comments imply student-centeredness in an individual sense, in outlook, if not in planning.

Similar predispositions existed in the thinking of the two respondent groups when the social-emotional readiness of the students was discussed, although this predisposition was less clearly discernable. Once again, teachers of the gifted/talented and teachers in the regular program expressed parallel considerations describing the impact of this factor on their planning decisions, although the readiness of the group as a whole figured more prominently than that of the individual in the thinking of teachers in the regular program.

The social-emotional readiness of the students was deemed to impact primarily on the timing and kinds of learning experiences and grouping strategies to which the students would be exposed. As with student ability, teachers of the gifted/talented were somewhat more disposed to see the individuals within the group, especially in view of the emphasis placed by them on the affective needs of their students. There was an explicit inclination to be sensitive to the timing of demands placed on the students, on the dynamics between individuals, on being closely attuned to their emotional and social needs, on taking their planning and interactional cues from these indicators, and on helping the students "to fit into the world."

There was a stronger sense, among the teachers in the regular program, of the technical side to assessing student readiness. In most cases, social-emotional readiness and management considerations went hand-in-hand. One respondent who felt that students were usually "ready" for the demands of their grade level or they would be operating at a disadvantage was simply describing a management sort of difficulty. This was also the case for a second respondent who considered readiness to be a factor, particularly when there was a distinct lack of uniformity of readiness across the group. A third respondent was motivated to increase or decrease the amount of structure within the learning experiences according to the assessment of student readiness; again, this was a management focus.

When commenting on the impact of students' intellectual, social, or skill needs on their curriculum decision making, certain emphases became evident within each respondent group. Two teachers in the regular program engaged in a round of diagnostic assessment--as indicated by their planning models--followed by the development of activities and strategies to meet those assessed needs. Appropriateness of these activities and strategies and accountability for their inclusion in the program were key considerations.

> "If I feel that students are lacking in certain areas intellectually, I'll certainly try to fill that gap, especially if it's something I know that they are going to be accountable for at the end of the year, or that I'm going to be accountable for teaching. Social skills, I think, are very, very important, and I try to teach those through all my subject areas and maybe just through classroom sorts of routines, and management in my lessons. So I try to teach those skills as an aside."

Throughout their commentary, teachers in the regular program seemed to focus on the needs of the group or of a large group within the entire class in their assessments of those needs, and similarly, activities and strategies aimed at addressing those needs were oriented to a group resolution. One respondent expressed this view in the context of a typically heterogeneous classroom.

> "...the skill needs are going to vary so much from student to student. If there's an overall weakness, whether it be note-taking or writing essay-type questions, or something like that, you're going to take that into consideration a little more. But on the whole, you have to sort of average it out, and go the middle of the road...."

All seven teachers of the gifted/talented, however, expressed definite tendencies toward consideration of the needs of their students as individuals. There was heavy emphasis, not just in determining the needs of the students, but on the continual assessment and re-evaluation of those varied needs on a day-to-day basis in order to maintain a high level of awareness at all times. One respondent expressed this orientation in this way.

> "[Students' intellectual, social, and skill needs] contain just about everything that you want to do. You have to look at that at every point in your planning. You have to re-evaluate it at every point in your planning. If you find that your planning is not meeting their intellectual needs, then you better get some more content in there and some more challenge. If you plan a unit for, for example, this group and the literature says gifted children...do not like people 'telling' them, and if you go ahead and do a unit like that, where I'm up there with an overhead and a podium every day, those social needs are..., they will not like that, and so you'd better know those things and you'd better plan for it. Skill needs...that's important too, because I have kids who have handwriting that is so bad you practically have to put them onto a word processor, and those needs all have to be considered. There are children who can write a book, and so you'd better look at all those things when you plan a Language Arts unit, and get the appropriate materials and strategies that will accommodate all of those needs."

Teachers of the gifted/talented were also well-versed in the use of Individualized Educational Plans (IEPs) and various inventories to get at the strengths and weaknesses of their students on an individual basis. For one respondent, the identification of strengths provided the tools for building up the areas of need. A second respondent was disposed to mesh a student's needs with current interests, again, on an individual basis, creating a powerful force for student learning and growth.

These disparate emphases in orientation when the factors of student ability, readiness, and needs were considered suggests that teachers of the gifted/talented are more inclined to view their students as individual entities requiring individualized attention to their unique strengths and weaknesses. The inclination was by no means total, but did represent a discernable shift in thinking--a sort of reiteration of the "kids come first, the program second" concept of education. While considerations of the strengths and weaknesses of the group as a whole and the planning of activities and strategies to accommodate those features were by no means non-existent among teachers of the gifted/talented, the student centeredness of their thinking was a readily distinquishable quality; this feature was a prominent characteristic of their thinking and planning.

For their part, teachers in the regular program were not oblivious to the individuals that formed the group under their tutelage either. However, a more definitive case can be developed in support of the notion that teachers in the regular program were more inclined to view these student factors in their collective manifestations and to resolve them accordingly.

Recognizing the merits of both orientations, and without making a value judgment on those merits, it can be reasonably concluded that the difference between the two respondent groups would seem to be one of degree of disposition rather than one of opposing views. That is, teachers of the gifted/talented are more inclined to view their students as individuals when planning than do teachers in the regular program.

Influences on Planning: A Closer Look

Collapsing the data in the two upper and two lower response categories drew attention to further areas of importance regarding the factors influencing teachers' curriculum planning. The results of this procedure are recorded in Table 3. Once again, the responses preceeding the slash (/) are the totals for the teachers of the gifted/talented. The totals after the slash (/) are for the teachers in the regular program.

Collapsing the data in Table 3 highlighted five new areas of emphasis in the decision making and planning of teachers of the gifted/talented and teachers in the regular program; as before, it was the differences in emphasis between the two groups that highlighted their importance. Two areas of emphasis fell within the factors related to the student once again, but three new areas appeared among the factors related to the curriculum.

Four other factors--two related to the teacher/planner, and two related to the learning environment--have been singled out for comment as well, for reasons which shall be made clear in due course.

Factors Related to the Students

Among the factors related to the student, student talent and students' interests seemed to influence the planning of teachers of the

Table 3 Summary of Responses, Teacher Opinionnaire/Rating Scale (Collapsed Version)

	Degree of Influence		
	Not at all Minimal 1-2 G/R	Moderate 3 G/R	Considerable Great 4-5 G/R
1. Factors Related to the Teacher/Planner			
a) past experience		1/0	6/6
b) personality	0/1	4/1	3/4
c) repertoire of skills/strategies		0/1	7/5
d) values and beliefs	1/1	1/2	5/3
e) knowledge of subject matter		3/2	4/4
f) other factors/planner	1/0	1/3	2/0
2. Factors Related to the Students			
a) student ability		0/2	7/4
b) student talent	0/1	0/1	7/4
c) social-emotional readiness	0/1	1/0	6/5
d) student behavior	1/1	2/3	4/2
e) intellectual, etc, needs	0/1		7/5
f) students' interests	0/1	0/2	7/2
g) other factors/students	0/1	1/2	3/0

	Degree of Influence		
	Not at all Minimal 1-2 G/R	Moderate 3 G/R	Considerable Great 4-5 G/R
3. Factors Related to the Curriculum			
a) subject matter itself	0/1	2/2	5/3
b) curriculum guide/objectives		3/0	4/6
c) availability of resources		2/3	5/3
d) current issues		2/4	5/2
e) integration/other subjects	0/2	1/1	6/3
f) other factors/curriculum	0/1	2/2	2/0
4. Factors Related to the Learning Environment			
a) class size	1/1	4/2	2/3
b) classroom organization	2/1	2/1	3/4
c) time		2/2	5/4
d) principal;teachers;parents	4/4	1/1	2/1
e) accountability system	0/1	4/1	3/4
f) other/school environment	0/1	1/1	3/1

N.B. G = Teachers of the Gifted/Talented
R = Teachers in the Regular Program

gifted/talented more than the planning of teachers in the regular program.

Teachers in both groups were quick to appreciate the contribution that student talent could make toward enriched learning experiences for everyone involved. Knowing what student talents were represented by the group motivated the planner to incorporate activities and strategies that would utilize those talents both in the learning tasks themselves and in the culminating activities.

> "Your groups of kids tend to change from year to year. Some years you've got a group of kids that are very keen on Drama, for example, and you can take and use that, or another year, this year, for example, I've got a group of kids that are quite highly artistic. And so you tend, maybe, to overemphasize that in your planning than you maybe would another year. So using student talents, I'd say, is pretty vital. They certainly come in handy when you're doing culminations; they tend to influence the way you would culminate a particular unit, depending on the particular talent of your kids."

There was a strong orientation toward taking full advantage of the opportunities presented by the presence of talent in the classroom, toward building on that talent, and toward providing outlets for its expression.

> "You grab the opportunity to use someone who has something to share, or who has had certain experiences, or they happen to be really keen on this and have read probably more than you have on the subject. You use their talents."

However, the two respondent groups began to diverge in their thinking about student talent once these contributions had been recognized. As with the other factors related to students discussed in the previous section, teachers in the regular program viewed student talent in its collective manifestation and, consequently, planned activities and culminations that would mesh with the pervading talent of the group.

This orientation stood in marked contrast to the expressed inclinations of the teachers of the gifted/talented. The respondents in this group demonstrated an obvious predisposition toward viewing the talents of their students as qualities that varied from individual to individual and which were uniquely exhibited by those individuals. Recognition was clearly given to the range of talents that existed within the group, and the teacher was motivated to accommodate and encourage that range in the plans for instruction and evaluation.

> "...when I'm planning for more of an individual project I will realize that some students have different talents. But when they go with their individual--on their individual projects it's more or less...I haven't planned it. They're using their talents to complete the project. And I more or less have to make allowances that some students that are very artistic will probably hand in a project that looks wonderful compared to another child who doesn't have that inherent artistic ability [but] will have a different way of wanting to show something. It's something that I sort of try and build into my plan that will allow for the child to go their own way."

> "One of the reasons we did the film project was we felt that we needed to let students' artistic abilities come through and maybe some of the other projects and assignments weren't allowing that to come through, and we needed to do that."

One respondent planned with the intention of incorporating the talents of specific individuals in the group as a means of transfering certain proficiencies--like leadership abilities--to the rest of the group, for their enlightenment. Not only did the group benefit, but the individual whose talent had been utilized was given a feeling of success and enhanced self-esteem for the contribution made. This showed a sensitivity and appreciation on the part of the teacher for the "gifts" possessed by individuals within the group, strongly supporting the "kids come first" approach to education endorsed by several respondents among the teachers of the gifted/talented.

A direct correlation between the impetus offered by student interests and the advancement of learning was recognized by respondents in both groups. All respondents were inclined to make use of students' interests in order to achieve motivational ends identified by them in the course of their planning, especially in terms of generating enthusiasm and commitment on the part of the students for the study at hand.

> "I have found in the past that if you're going to go to the trouble of, you know, of doing some of your own curriculum development, you better base it on things the kids are interested in or you're just not going to get that, the same enthusiasm."

The lesser emphasis placed on student interests as a weighing factor on curriculum planning by teachers in the regular program was readily explained by them. One respondent discerned a responsibility to broaden the scope of student interests and was therefore less likely to allow student interests to limit such planning decisions as choices of topics.

> "Students don't always know what's best for them and they haven't been exposed to all the different interests, or all the different subject areas, so they may automatically not have an interest in something, but it doesn't mean that they can't develop an interest. So I don't consider [student interests] highly. I figure you make it interesting, and the kids are going to find it interesting. And you do that with everything, so I don't necessarily take into consideration the fact that some kids tell me they don't like ecology; I'm still going to teach ecology."

Similarly, where student interest might be lacking for a study mandated by the curriculum guide, one respondent expressed determination in building up the level of interest necessary to successfully engage the students in the study.

Beyond the motivational aspects attendant on students' interests, two respondents saw the value of accepting student input into proposed areas of study, sometimes in the form of joint decision making over content and/or process considerations and sometimes as a result of a sudden interest that spontaneously arose within the group.

The distinction between the orientation of teachers of the gifted/talented and teachers in the regular program became clear in view of the fact that, once again, teachers in the regular program viewed student interest synonymously with "group" interest and acted accordingly in their curriculum planning. Even where student input was solicited, a consensus was reached such that the resulting content/process decisions were binding on the group.

In contrast, teachers of the gifted/talented were much more disposed to allow the individual interests of their students to suggest content and process, although there was still abundant attention to group concerns and group interests in their curriculum planning. As was pointed out by one respondent, one of the founding reasons for the Academic Challenge Program was the development of a vehicle that would promote student interests and provide outlets for those interests. This was often achieved through use of the technique of curriculum compacting, in which core curriculum areas were condensed to, among other things, free up time for independent investigation along the lines of personal interest.

When selecting topics for research, in choosing modes of inquiry, and especially in the generation of student products, the interests of the students were unquestionably in the minds of the teachers of the gifted/talented. While areas of common interest did arise and were explored as a group, if only for the sake of efficiency, strong emphasis was placed on developing the unique interests of each student along lines of thinking and modes of inquiry that appealed to them. Many of their statements made previously concerning the impact or importance of student talent on their planning apply to student interests as well.

At the same time, respondents in this group were careful not to be easily swayed or distracted by transitory interests. While being cognizant of what was current in children's lives, the teacher had also to discriminate between the interests that were of greater impact and substance and those which were of less lasting value.

> "I also feel with student interests that I am the adult in the group and that I would not follow just a 'fluffy' interest if it just happens to be the drugs or the sock-hop or whatever is of the moment. I think we do have a directive role, one that , you know, we have to weigh and priorize, perhaps because we have a bit more experience in life."

Showing similar restraint, three other teachers of the gifted/talented endorsed the importance of attending to student interests in planning, although it was felt that there also had to be reasonable correspondence with the curriculum guide, with identified student needs, and with being in-step with what was going on in the rest of the world.

A common theme runs through the findings concerning the impact of student talent and interests on teachers' curriculum planning and the other student factors discussed in the previous section. Simply stated, the theme is grounded in the basic view of their students held by teachers of the gifted/talented while they are planning as compared to the view held by teachers in the regular program while they are engaged in the same activity. Teachers of the gifted/talented appeared to focus on their students--while planning--as unique individuals with special, or idiosyncratic, talents, abilities, interests, needs, and personalities. The plans that were made, and the decisions that were implemented reflected this student-centered outlook. However, the qualification that was applied in previous sections applies here as well; the focus is by no means complete, but the inclination is discernible.

Similarly, it would be an over-generalization to state that teachers in the regular program do not see the individuals within the group. What was indicated, however, was that, when planning at least, the tendency among teachers in the regular program was to view these same student factors in terms of their relevance to the class as a whole and to make instructional and evaluative provisions for them based on that perception.

Factors Related to the Curriculum

Three factors related to the curriculum that influence the planning of teachers have been selected for discussion. Two of the factors--current issues and integration with other subject areas--were chosen because the total number of responses by each respondent group were sufficiently discrepant to warrant a closer examination. The remaining factor--the curriculum guide/established objectives--was interesting because it represented the only instance in the category indicating greatest influence where the number of responses from the teachers in the regular program considerably surpassed the number of responses from the teachers of the gifted/talented.

Respondents in both groups spoke out strongly in favor of using current issues to increase the relevance of a given study and to build on students' interest or concern over topical events that impinge on their lives. The proviso was added that the issues selected be appropriate to the intellectual level of the students.

Further statements as to the suitability or applicability of these issues were indicative of the readiness of the respondents to include them in their curriculum planning and of the value that was placed on them as instructional vehicles.

Beyond the reasons already suggested by both groups for incorporating current issues into the curriculum, teachers in the regular program were willing to integrate them in situations where the issue and the topic of study coincided or where, in the judgement of the planner, the issue would significantly raise the students' level of awareness to warrant the time spent on its examination. One respondent expressed relevant concerns about the inclusion of current issues in the curriculum when these conditions were not met.

> "I will say there though that...we have so much material in our curriculum to cover in a year that it really limits the amount of time we can spend on current affairs and research in current affairs and that sort of thing. But yes, if I think there is something there that is especially important, then I'll spend time on it."

An interesting point was made by one respondent whose use of current issues in the instructional setting was based on the desire to update a curriculum that might be several decades old, occasional and partial revisions notwithstanding.

Although teachers of the gifted/talented made many similar comments stressing the importance of current issues to the curriculum, two other points were expressed. These issues, stated one respondent, were important to include in the curriculum if they were seen to affect a large percentage of the population, had lasting impact, and were potentially significant. Furthermore, and perhaps more importantly, if it appeared that certain issues were applicable to, or could add to, the knowledge base being investigated, their incorporation was sure. This emphasis was consistent with the concept of broad-based learning (Passow, 1982) applied also in the use of global themes highlighted in the teachers' planning models discussed earlier in the chapter. Building awareness and relevance into the curriculum were seen to add impetus to learning.

A second respondent relied on historical context to build meaning around the issues. Another application of broad-based learning could be detected in this approach.

> "...I also look at, you know, the past, present, and future concept of things. It's not just the current issues, but how did this fit in the past, where did it go, what's going to happen in future? So it's trying to put everything in its perspective, in where it fits."

The topic of integration with other subject areas also suggested some important differences in the thinking of teachers of the gifted/talented and teachers in the regular program. Initially, there was appreciation expressed by all respondents, in varying degrees, for the advantages of integration to the students as well as to the teacher/planner. Three respondents among the teachers in the regular program described these advantages in terms of the efficiency and ease of planning when integration is used as a vehicle. There was less overlap among subject areas and more transference of skills across subject boundaries as well.

The general consensus among teachers in the regular program, with one possible exception, was that integration could be implemented where and when it was applicable but that it was not a motivating factor in their planning. It was suggested that integration worked best under optimum conditions but, in the realities of the classroom, was more often a "nice fringe" to enjoy when it could be incorporated. The implication was that those times were few and far between.

Taking an opposing view, one respondent indicated that integration was not desired; the feeling was that children need variety in their lives, and to develop one concept or theme through a number of subject areas would be tedious for both the teacher and students.

Teachers of the gifted/talented were doubtless aware of the advantages to be gained from using multi-disciplinary integration as a planning vehicle. However, their appreciation was taken to greater lengths because of the extent to which it was employed by them, and also because of its importance as a basic tenet in gifted education. One respondent described a possible rationale for integration that was supported by the comments of the other respondents.

> "We don't live in such insularity [as suggested by separate subjects], and we have to build our concepts and modify them with an ever-evolving perspective. Seeing the connections, I think,

is one of the non-negotiables in gifted ed, so the kids have to be constantly aware of the transference of the main ideas and themes."

In essence, this respondent equated integration closely with how we live in the world and how we develop and modify our understandings of the world. Several other respondents contributed to that view by noting how students who are able to function at higher levels of thinking (Bloom's Taxonomy) are already seeing the connections between the disciplines and therefore need to be given opportunities to explore those connections. There was repeated mention of the strong emphasis placed on integration in the Academic Challenge Program, which was reflected in the various statements of the respondents. That emphasis was seen to be greatly assisted by the use of the global theme to guide the planning.

An interesting turnabout in emphasis was evidenced in the influence of the curriculum guides and established objectives on curriculum planning by teachers in both groups. In this case, teachers in the regular program were more influenced by this factor than were teachers of the gifted/talented. As before, however, certain key perspectives were held in common by all respondents. The curriculum guides were held in considerable regard for their contribution to planning, especially in terms of setting out the bulk of the objectives, subject areas, topics, and skills to be covered at a given grade level. The view that the guides provided the total educational direction for the province while leaving the means to accomplish it in the hands of the teacher/planner was reiterated by both groups.

Teachers in the regular program were strongly motivated to place their confidence in the curriculum guides and expressed reliance on their lead. One respondent made reference to the need to juxtapose the curriculum guides alongside the given group of students in order to make decisions on the depth and breadth of learning that could actually be attained in the time available and thus plot a course of action. This process was implied by the statements of three other respondents who described the need to juggle content and time considerations. The realities of the classroom suggest that this orientation is probably the operative line of thinking in the regular program.

The realities of the classroom also impinged on the thinking of the teachers of the gifted/talented. There was very strong motivation to cover the "core curriculum" as a prelude to extending it, and the certainty of standardized examinations at the year's end doubtless added to the motivation, if only to avoid placing their students at a disadvantage in terms of missed content. Nevertheless, extending, or differentiating, the curriculum is an essential component of the Academic Challenge Program and received considerable emphasis as well. This may very well explain the lesser emphasis placed on the curriculum guides and established objectives by teachers of the gifted/talented. While these planning tools are useful in the planning of the core curriculum, they would probably have limited usefulness for the extension component of the program. Teachers of the gifted/talented are likely forced to turn to other resources to develop that component; hence the lesser overall emphasis on the provincial resources.

Other Factors Receiving Emphasis

Though not showing up as dicrepancies in emphasis between teachers of the gifted/talented and teachers in the regular program, three areas from Table 3 deserve brief attention. This is because they have commanded a prominent emphasis in the thinking of both groups (n = 9 or more respondents out of 13 possible). Two factors relate to the teacher/planner--past experience and the teacher's repertoire of teaching skills and strategies. One factor relates to the learning environment--time. A fourth factor, the influence of the principal, other teachers, and parents, bears further scrutiny because of the prominent emphasis it received from eight respondents in both groups at the lower end of the scale, thus indicating lesser influence.

Respondents in both groups noted the importance of past experience on their present planning in a variety of ways. Past successes and failures were seen to determine present decisions regarding choices of topics, handling of activities and routines, and teaching strategies employed. Professional growth was deemed to occur through the evaluative consideration of those past events. One respondent referred to teaching as a learning process in this regard.

A second respondent expressed a very balanced view of the impact of past experience on present decision making. Though recognizing the strong influence of past successes and failures, it was felt that one should be aware that yesterday's successes may be tomorrow's failures, and vice versa.

The past experiences of a personal as well as professional nature were seen to enrich the program for the students. These included travel and previous teaching methodologies (e.g., team teaching, open area schooling). Similarly, given years of experience in the field, teachers come to instinctively know what knowledge is significant, what children's concerns are, and what the priorities are, an expertise which greatly enhances a teacher's effectiveness in the classroom.

The influence of the teacher's repertoire of teaching skills and strategies seemed to translate into a situation in which the teacher/planner draws upon one or more acquired skills and/or strategies in response to an assessed instructional need. The tendency is to rely more on those skills or strategies that have proven valuable to the teacher, are "comfortable" to use, or have become part of the routine with which the teacher has chosen to operate.

One respondent expressed reservations about becoming too dependent on a narrowly-based repertoire and advocated occasional "risk-taking" excursions into unfamiliar territory. This suggestion was supported by the comments of numerous others who advocated ongoing evolution and growth of one's personal repertoire to fill in any gaps that surely exist.

Comments from both groups regarding the element of time as an influence on teachers' curriculum planning could be reduced to one common theme: there was never enough of it. The effects of this fact of life on planning and subsequent instruction were many and varied. The amount of time--usually personal time--available for planning determined the depth and breadth to which the study could be developed;

respondents expressed a wistful desire to have more time to plan the way they would like to plan. At the same time, there had to be some provision made for the teacher to have other pursuits besides planning--especially those totally removed from the teaching profession--in order to be able to "be there for the children emotionally." A balanced approach seemed to be called for.

Respondents appeared to feel the constraints of time more in terms of the limits it placed on their classroom instruction than on their actual planning, but the decisions that had to be made were nevertheless confronted preactively. At that point, respondents spoke in terms of trade-offs, borrowing time from one subject to give to another and back again, and being ruthless about deleting content or activities for which no time was available. In the final analysis, as one respondent stated it, "...we have a finite amount of time that we have with the kids, and we must do what we can within that time for the maximum number of kids."

A final area of note focuses on the influence that school administrators, colleagues, and parents of students had on teachers' curriculum planning. As the data from Table 3 suggest, the impact of these significant others on the respondents was fairly minimal on the whole. The comments made by respondents in both groups indicated that an atmosphere of mutual respect and support was desirable and appreciated. The area of greatest influence on the actual planning arose from the ongoing exchange of ideas that tends to occur among teachers within the school environment. Input into planning from school administrators and parents of students was reportedly very little or nothing at all.

Conclusions

1. By and large, teachers of the gifted/talented felt very free to make curriculum decisions, within certain limitations placed on them by the provincial mandate. They were also well aware of the opportunities available to them because of their additional mandate to extend, or differentiate, the curriculum for their students. Teachers in the regular program felt somewhat less free, but on the whole appreciated that, while Alberta Education prescribed the curriculum for them, they were free to determine the means by which the curriculum was presented.

2. When considering the influence of student factors on their curriculum planning, teachers in the regular program were oriented to viewing their students as members of a "group" with pervading levels of ability and readiness and a commonality of interests, talents, and needs. Planning for the group was simply that--for the group. Teachers of the gifted/talented, on the other hand, tended to view their students as having unique abilities, talents, personalities, needs, and interests and were much more likely to take these individual differences into account when planning. Neither respondent group operated exclusively within these orientations, nor were the extreme ends of the individual vs. group continuum represented. There was merely a prominent disposition within each respondent group toward

being individual-centered or group-centered. The difference between the two groups would seem to be one of degree of disposition rather than one of opposing views.

3. Both respondent groups recognized, and were influenced by, the benefits of using current events and integration strategies to further instruction. Teachers in the regular program were motivated to implement them if they were appropriate, available, and would markedly enhance student awareness and learning. The demands pertaining to a differentiated curriculum--organized to include more elaborate, complex, and in-depth study of major ideas, problems, and themes that integrate knowledge with and across systems of thought--prompted teachers of the gifted/talented to subscribe more completely to the use of current events and integration in their curriculum planning. The use of a global theme to guide planning was another application of this orientation.

4. Teachers of the gifted/talented appeared to be less influenced by the dictates of the curriculum guides and established objectives, not because they didn't realize their responsibility to cover the "core curriculum", but because the demands of a differentiated curriculum necessitated their stepping beyond the boundaries outlined by the provincial Program of Studies. Their lesser emphasis on the impact of the guides on their planning merely reflected this reality.

5. Teachers in both respondent groups seemed to be about equally

influenced by such factors as their past experience, their repertoire of teaching skills and strategies, and time constraints. The main effects on their curriculum planning were seen in their choices of topics, activities, or approaches and in the degree of development allocated to a given study. Similarly, they were about equally uninfluenced by their school administrators, colleagues, and the parents of their students when it came to making curricular decisions. The exchange of ideas among colleagues had the greatest impact on their planning.

Further Discussion of the Findings

The primary assumption underlying this study was that any differences between the preactive curriculum planning of teachers of the gifted/talented and that of teachers in the regular program would be attributable to the obvious differences between the two groups of students each program served. At the same time, however, it would be short-sighted to ignore other variables which might possibly account for these differences.

The fact that all seven teachers of the gifted/talented were female while all but one teacher from the regular program were male raises the possibility that planning differences were largely a function of gender. In responding to this suggestion, it ought to be noted that no studies were found which would substantiate such a correlation. It is also interesting that research by Toomey (1977), though not intended to investigate gender influences on curriculum planning, indirectly refutes the gender difference suggested by this study. Of the four participants in his research, the two males demonstrated an orientation to planning that most closely approximated the planning of the female teachers of the gifted/talented, while the two females planned in ways similar to the mostly male teachers in the regular program.

Closely linked to gender is the possibility that personality traits influence the curriculum planning of teachers of the gifted/talented and, perhaps, were a key selection factor in their initial assignment to the Academic Challenge Program. However, the teachers of the gifted/talented participating in this study gave minimal acknowledgement to this possibility. While not addressing the selection criteria for assignment to the Academic Challenge Program directly, all seven respondents indicated that many of their planning behaviors and attitudes were new to them and had been acquired since their involvement in the program. This suggests that, at least in terms of curriculum planning, personality traits do not account for the planning differences in this study.

In view of the fact that the Academic Challenge Program is of relatively recent origin, it is conceivable that any planning differences noted between the two groups of teachers might be attributable to the newness of the program itself and the corresponding lack of experience in planning for the gifted/talented possessed by these teachers. This might be readily admissible were it not for the fact that the teachers of the gifted/talented in this study were, in fact, functioning capably in accordance with the major emphases in gifted education. Though perhaps "green" in comparison with other programs for the gifted/talented with a much longer history, it was obvious that these teachers were benefiting from the wealth of experience available from these enduring programs and, indeed, from the thinking of the leaders in gifted education to whom they had been exposed through in-servicing.

While one can never totally eliminate the admissibility of these other factors, it appears that the preactive curriculum planning of teachers of the gifted/talented and teachers in the regular program differed primarily on the basis of the students served by the respective programs.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

This exploratory study compared the preactive curriculum planning of teachers of the gifted/talented and teachers in the regular program. This chapter will present a brief review of the entire study, reported in four sections. The first section is a summary of the research problem and the methodology used to investigate the problem. This is followed in the second section by a restatement of the conclusions drawn from the principal findings reported in Chapter IV. The third section contains implications for teacher education, for curriculum planning, and for curriculum development. Recommendations for further research are discussed in the fourth section.

Summary

The study was undertaken to address a deficiency of current research on curriculum planning by teachers generally and, beyond that, an apparent dearth of research having a specific focus on the curriculum planning of teachers of the gifted/talented. These gaps were detected as a result of a survey of relevant literature concerned with the preactive planning of teachers engaged in curriculum planning at the classroom level in both the regular program and in programs for the gifted/talented; in the latter area no relevant studies were located.

The emphasis on the curriculum planning of teachers of the gifted/talented was based on the assumption that gifted/talented children have special learning needs. The literature pertaining to this subject suggested that the learning characteristics of this unique group did, in fact, constitute special needs which could not be satisfactorily met within the regular program. This implied the generation of a different program--qualitatively differentiated, to use a byword in education for the gifted/talented--through which these special needs could be met. Having confirmed the first assumption from the relevant literature, it could next be assumed that a qualitatively differentiated program required similarly differentiated, or at least altered, thinking on the part of those practitioners working with this special needs group in their approach to curriculum planning.

It was this latter assumption--that teachers of the gifted/talented would employ different planning strategies and be influenced by different planning factors than would teachers in the regular program--that provided much of the impetus for the study and guided the investigative methodology. The purposes of the study could be optimally addressed by comparing the curriculum planning of teachers in the regular program and teachers of the gifted/talented, using a series of research questions to guide the investigation. These research questions were:

(a) What are the general perceptions of teachers concerning certain dimensions of curriculum planning; specifically, attitudes toward curriculum planning, types of planning done, type(s) of planning preferred, indicators of effective planning, personal reasons for planning, and preparation for curriculum planning through teacher education?

(b) What model(s) of curriculum planning do teachers routinely employ?

(c) What factors influence the curriculum planning and decision making of teachers and how is this impact experienced?

(d) Which of these factors exert a predominant influence on teachers' curriculum planning?

In order to pursue these questions, two measuring instruments were constructed--an interview guide and a teacher opinionnaire/rating scale--to elicit appropriate data from a sample population of seven teachers of the gifted/talented and six teachers in the regular program who were matched according to their approximate grade level placement in Division II and to their years of teaching experience.

The researcher arranged to meet and interview each respondent on an individual basis at the respondent's school, at a time selected by the interviewee, and in an area which provided privacy and a minimum of interruption; interviews were audio-taped and later transcribed to permit the necessary analysis. In order to reduce the number of complicating factors, the study was restricted to an examination of the preactive curriculum planning (of a Science topic with multi-disciplinary possibilities) practiced by teachers working in Grades Four, Five, or Six.

Conclusions

The conclusions related to the four research questions underlying the study are contained in this section. They have been organized into three major groupings consonant with the three major sections comprising Chapter IV.

General Perceptions of Curriculum Planning

1. All respondents supported the notion that classroom teachers are curriculum planners. However, teachers in the regular program perceived their function to be one of translating prescribed curriculum into instruction, whereas teachers of the gifted/talented felt their role involved transforming the curriculum beyond the parameters established by Alberta Education.

2. All respondents saw their personal role as curriculum planners operating within two distinct areas of operation, namely, to discern what needs to be taught and to decide how to teach it. For teachers in the regular program, these were areas that set the limits of their planning function. Teachers of the gifted/talented, however, felt drawn beyond those limits because of the unique demands placed on them by the students they teach.

3. All respondents expressed their appreciation for the freedom they possessed in making decisions about the curriculum and their proposed teaching methodologies, citing teacher and student satisfaction as the main benefits to be realized. Teachers in the regular program exercised their freedom within the parameters of the

curriculum, while teachers of the gifted/talented experienced greater freedom as a result of the mandate they have to differentiate the curriculum for their students.

4. All respondents recognized, and accepted, the responsibility resting on them to make reasonable and accountable curricular decisions. Again, teachers of the gifted/talented, by virtue of their mandate to provide a differentiated curriculum, tended to focus on their sense of responsibility to a greater degree. There was also a sense, perhaps, of feeling less secure about making such decisions outside of the prescribed boundaries set by the province.

5. Teachers of the gifted/talented and teachers in the regular program engage in essentially the same types of curriculum planning, citing long-range, unit, and daily/lesson planning most often. The most notable exception to this generalization is the adherence on the part of teachers of the gifted/talented to engage in cooperative planning with their students. While teachers in the regular program were bound to consider student needs and interests in the course of their planning, there was little, if any, evidence that student input into the actual planning was ever sought.

6. Teachers of the gifted/talented expressed a preference for long-range planning over all other options as it provided them with the guiding framework within which the global theme for the year could be developed. Similarly, it enabled the teachers to operate on the

short-term without departing from the "big picture".

7. Teachers in the regular program expressed a variety of preferences, including unit planning and lesson planning, which appeared to parallel their preferred styles of teaching.

8. All teachers rely on overt student response--interest, enthusiasm, motivation, success--to assess their planning effectiveness. The role of the teacher/planner in eliciting these responses was considered important. While probably not overlooking the objective measures, teachers of the gifted/talented demonstrated an appreciation for subjective indicators as well.

9. Effective curriculum planning tended to promote positive student behaviors indicative of their level of commitment to and involvement with the study in which they were engaged, although this was more pronounced among teachers of the gifted/talented. Teachers of the gifted/talented also differed from teachers in the regular program in the level of participatory behaviors planned for and sought, as well as in their emphasis on student products.

10. Teachers of the gifted/talented were alone in their identification of teacher satisfaction, evaluation of the plans themselves, and parental feedback as indicators of planning effectiveness.

11. Teachers of the gifted/talented and teachers in the regular program perceive similar benefits for planning. An interesting exception was in the area of professional growth about which two respondents among teachers of the gifted/talented made mention. Teachers of the regular program made no comments in this area.

12. In terms of their psychological well-being, all respondents appeared to be cognizant of the personal benefits derived from their involvement in curriculum planning. These included such things as personal satisfaction--interest, enjoyment, challenge, motivation, stress reduction--derived from engagement in the process of planning, from the exercise of one's creative impulses, and from recognition of one's contribution to the edification of others.

13. Teachers in both programs planned in ways designed to ease the demands, and accompanying stress, related to the task of teaching.

14. Planning was seen by a significant number of respondents to enhance student growth and achievement; this, in turn, was seen to be ultimately beneficial to the teachers themselves, from a purely altruistic standpoint.

15. Few, if any, courses at the undergraduate level of university provide more than minimal preparation for the exigencies of curriculum planning. However, there were courses in Curriculum and Instruction which contributed to their thinking about planning. Courses in

Educational Psychology were cited for increasing the understanding that teachers had about their students, with subsequent impact on their curriculum planning.

16. Graduate level courses did not appear to make an appreciable difference in the level of preparedness teachers felt in curriculum planning.

17. Teachers credited the predominant share of their growth toward becoming competent curriculum planners to their own experiences with the planning task and to their in-service professional development.

Teachers' Planning Models

1. The curriculum planning of teachers would seem to be highly idiosyncratic and does not strictly follow the classical Tylerian model of curriculum planning although all the elements of that model are present. The planning of teachers of the gifted/talented contains a number of different elements from that of teachers in the regular program, most notably in terms of the level of student input into their planning and in the use of a global theme to stimulate and organize their thinking while planning.

2. Teachers of the gifted/talented appear to engage in less preactive planning than do teachers in the regular program and were much more predisposed to adapt, revise, or abandon their own plans in

favor of the emergent needs and interests of their students. Teachers in the regular program were more prone to refine their plans to the level of specific ideas for lessons, with little or no room for negotiation.

3. A realignment in the traditional roles of teacher and student in the program for the gifted/talented is evident. In keeping with current orientations in education for the gifted, students have assumed a more assertive, participative role in their learning, with a commensurate reduction in the traditional dominance of the teacher. The teacher's role has become more supportive and facilitative, and far less overtly orchestrative in an environment that is noticably student-centered.

4. Teachers of the gifted/talented placed much greater emphasis on the use of a global theme and on multi-disciplinary integration as organizers and stimulators of planning. The global theme concept is not part of the regular program at all and, although there was some evidence of the use of integration among teachers in the regular program, generally speaking integration was not a motivating factor in their planning.

5. Teachers of the gifted/talented appeared to place greater importance on the constraints imposed on them by the availability of time, both to plan and to instruct.

6. While all respondents (with one exception) tend to subscribe to a preferred planning model, there are occasions when digressions from the norm were warranted. Because their students were more centrally involved in the planning process, teachers of the gifted/talented were more responsive to the wishes of their students.

7. There were limits placed, by respondents in both groups, on the time and energy that was possible to expend on the type of planning illustrated by the teachers' planning models. For practical reasons, there was considerable reliance placed on pre-planned units, although for teachers of the gifted/talented the need to differentiate the curriculum precluded this reliance on outside resources.

8. Owing to the relative newness of the Academic Challenge Program, there was a tendency among teachers of the gifted/talented to view themselves in a learning mode with respect to their curriculum planning for this special needs group. Until more experience is gained in working with these children, it is likely that their curriculum planning models will continue to evolve.

Factors Influencing Curriculum Planning by Teachers

1. By and large, teachers of the gifted/talented felt very free to make curriculum decisions, within certain limitations placed on them by the provincial mandate. They were also well aware of the opportunities available to them because of their additional mandate to

extend, or differentiate, the curriculum for their students. Teachers in the regular program felt somewhat less free, but on the whole appreciated that, while Alberta Education prescribed the curriculum for them, they were free to determine the means by which the curriculum was presented.

2. When considering the influence of student factors on their curriculum planning, teachers in the regular program were oriented to viewing their students as members of a "group" with pervading levels of ability and readiness and a commonality of interests, talents, and needs. Planning for the group was simply that--for the group. Teachers of the gifted/talented, on the other hand, tended to view their students as having unique abilities, talents, personalities, needs, and interests and were much more likely to take these individual differences into account when planning. Neither respondent group operated exclusively within these orientations, nor were the extreme ends of the individual vs. group continuum represented. There was merely a prominent disposition within each respondent group toward being individual-centered or group-centered. The difference between the two groups would seem to be one of degree of disposition rather than one of opposing views.

3. Both respondent groups recognized, and were influenced by, the benefits of using current events and integration strategies to further instruction. Teachers in the regular program were motivated to implement them if they were appropriate, available, and would markedly

enhance student awareness and learning. The demands pertaining to a differentiated curriculum--organized to include more elaborate, complex, and in-depth study of major ideas, problems, and themes that integrate knowledge with and across systems of thought--prompted teachers of the gifted/talented to subscribe more completely to the use of current events and integration in their curriculum planning. The use of a global theme to guide planning was another application of this orientation.

4. Teachers of the gifted/talented appeared to be less influenced by the dictates of the curriculum guides and established objectives, not because they didn't realize their responsibility to cover the "core curriculum," but because the demands of a differentiated curriculum necessitated their stepping beyond the boundaries outlined by the provincial Program of Studies. Their lesser emphasis on the impact of the guides on their planning merely reflected this reality.

5. Teachers in both respondent groups seemed to be about equally influenced by such factors as their past experience, their repertoire of teaching skills and strategies, and time constraints. The main effects on their curriculum planning were seen in their choices of topics, activities, or approaches and in the degree of development allocated to a given study. Similarly, they were about equally uninfluenced by their school administrators, colleagues, and the parents of their students when it came to making curricular decisions. The exchange of ideas among colleagues had the greatest impact on their

planning.

It should be noted that the conclusions recorded in this section must be treated with caution since the evidence on which they are based is subject to three major limitations. First, the sample used was small and was restricted to one urban area. Second, the data was collected over a relatively short period of time. And third, a possible discrepancy exists between how teachers perceive themselves to plan, and how they plan in actual fact. Bringing the planning process to the conscious level may have further impinged upon the adequacy of their responses.

Implications

Some of the findings of this study suggest that preservice teacher education should place greater emphasis on a more thorough grounding in curriculum planning. It was obvious from statements made by teachers of the gifted/talented and teachers in the regular program that there was a general feeling of being less than prepared for the exigencies of planning. Any approbation awarded to teacher training institutions arose from a recognition of basic planning skills acquired at the undergraduate level. These were invariably included in the Curriculum and Instruction courses pertaining to specific subject areas, with often only incidental reference to curriculum planning in those areas. A greater number of beneficial courses were cited at the graduate level, a period of study which often begins well after the teacher has seen many years of service in the field.

Curriculum planning was seen to be a teaching function that developed "in the trenches," as it were. Consequently, teachers were much more apt to credit their growth in the area of curriculum planning to their accumulated experience with the planning task itself as well as with in-service education opportunities made available to them. Again, however, this growth seemed to be realized from exposure to educational programs and/or instructional strategies which subsequently influenced their approach to curriculum planning. There was no mention of any in-service activities in which curriculum planning strategies or practices formed the central theme.

The possibilities for both pre-service and in-service teacher education are apparent. There is a perceived lack of attention to the actual process of curriculum planning at both these levels. Agencies for teacher education are being challenged to addresss this lack.

If the proposition is accepted that curriculum planning itself must become more of a focus in teacher education programs, it might well be asked which curriculum planning model ought to be advanced. There does not seem to be any irrefutable evidence that an optimum planning model exists at the present time. This is indirectly substantiated by the apparently idiosyncratic nature of curriculum planning that was demonstrated by the thirteen respondents in this study, as well as by other studies of curriculum planning by teachers (e.g., Clark & Yinger, 1979; Favor-Lydecker, 1981; Toomey, 1977).

Until such evidence is forthcoming, it might be advisable to structure teacher education programs along the lines of what is actually being done in the field by experienced practitioners. The Tylerian model, long held to be the definitive model of curriculum planning, may need to undergo a paradigmatic transformation to accommodate the realities of planning. The stages of the model themselves remain theoretically sound and were definitely visible in the planning models described by the respondents in this study. However, it is in the rigid adherence to the lock-step, linear sequential functioning of the Tylerian model that theory and practice have parted company.

There is reason to believe that teachers recognize the value of the individual elements within the Tylerian model since they incorporate them--albeit randomly--into their planning. This is, of course, in addition to other elements which they freely include as their particular planning situations dictate. One possible route for teacher education to take which might serve to close, or at least narrow, the gap between theory and practice would begin by accepting the fait accompli of curriculum planning as it is currently practiced. Emphasis could then be placed on the individual planning elements themselves in order to develop the expertise of potential and practicing teachers in manipulating and utilizing these elements in ways uniquely suited to their own planning styles and requirements. The integrity of each element would be retained; at the same time the task of curriculum planning would be enriched by its newfound flexibility and versatility.

Naturally, certain planning elements might be included in teacher education programs for teachers of the gifted/talented and other special needs groups that might not be a part of programs directed at teachers in the regular program because of the unique requirements of special needs students.

Other findings related to the curriculum models employed by respondents in the sample served to confirm a state of affairs in education for the gifted/talented which was undoubtedly advocated and hoped for, but was perhaps lacking verification. Simply put, teachers of the gifted/talented were operating with some of the major emphases in gifted education very clearly in mind. These teachers indicated in their comments that exposure to literature on various topics in gifted education, in-service education, and their own personal experience with the children themselves had contributed to that orientation. In particular, there was considerable attention paid to broad-based learning through integration and the use of global themes, to creating opportunities for self-initiated and self-directed learning and growth, to the use of appropriate and specialized resources, and to individualization based on student interest, ability and need.

In addition to being essential components of education for the gifted/talented, these emphases are also very sound pedagogical practices. As such, then, it is important to maintain their presence in the curriculum planning of teachers of the gifted/talented, both by way of the content of teacher education programs such as that described above, and also by way of actual curricula designed for use in programs for the gifted/talented. In this latter regard, there are possibilities for developers of curriculum, at whatever level they might function, to create curricula incorporating these components without, however, impairing the necessary flexibility of the teacher/planners or reducing the involvement of gifted students in those planning decisions.

The appearance of these pedagogically sound practices in the curriculum planning of teachers of the gifted/talented has implications for the curriculum planning of teachers in the regular program as well. Is it not possible that these same practices might be applied to some degree in regular programs, thereby enriching the learning opportunities of children in those programs? It is not suggested that the distinction between students in either program be diminished or eliminated; the nature and characteristics of gifted learners preclude that possibility. What is suggested is that certain positive features of programs for the gifted/talented be incorporated into regular programs to the extent that would be appropriate and would enhance those programs. Surely regular programs would benefit from a greater emphasis on broad-based learning, on individualized programming that is sympathetic to students interests, abilities and needs, and on self-directed learning and growth. As Passow (1982) has indicated, there are curricular characteristics which are essential for the gifted, but they are desirable for all learners as well.

Education for the gifted/talented would in no way suffer from this commensal borrowing by regular programs. In fact, there might be increased benefits by way of a reduction of any tensions that currently exist among the teachers in the two programs.

Recommendations for Further Research

The findings of this study represent a small beginning for research in a new area of curriculum planning, that of curriculum planning of teachers of the gifted/talented. Consequently, several areas of importance for future research are indicated. First, in view of the fact that this study constituted, at best, a cursory overview of the curriculum planning of teachers of the gifted/talented, it would be valuable to pursue this same study in much greater depth with at most two or three teachers of the gifted/talented. The possibilities for increasing our depth of understanding of this important sub-group within the teaching profession make it an attractive prospect.

Second, since the curriculum planning of teachers of the gifted/talented differs considerably from the planning of teachers in the regular program--solely because of factors related to the gifted/talented students themselves--it is entirely conceivable that teachers engaged in curriculum planning for other special needs children (e.g., trainably mentally handicapped, hearing impaired, learning disabled) might be similarly motivated. The potential for research in these areas is limited only by the number of categories of special needs children that have been currently identified.

A very interesting element in the curriculum planning of teachers of the gifted/talented was the greater degree of involvement of the students in the actual planning decisions made by these teachers. The role of the gifted/talented student in curriculum planning constitutes a fruitful third area for further research.

Fourth, the time of year in which the planning process is undergone arose as a variable worthy of additional scrutiny. This variable appeared during data collection. Statements made by the sixth respondent among the teachers in the regular program interviewed in September rather than in May suggested that planning considerations were, in fact, dependent on the time of year in which the planning was being done. Just what, and how much, effect this variable has on the curriculum planning of teachers needs to be discerned.

And finally, it seems important to discover what changes should be incorporated into the curricula of teacher education institutions to assist future classroom teachers in the task of curriculum planning. Similarly, investigations might be conducted to ascertain how in-service programs might be expanded in order to assist practicing classroom teachers in becoming more effective curriculum planners.

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APPENDIX A

Letter of Information for Study Sample

Dear

The following information will serve to fill in the details related to our telephone conversation and your stated intention to participate in this research study. If you have any further questions, please do not hesitate to call me at any time (432 - 3913).

INTERVIEW PACKAGE: A Study of Teacher Planning

Information about the manner in which teachers plan preactively is not extensive, and is in need of updating. Research into the planning strategies of teachers of the gifted/talented is nonexistent and constitutes a new area for investigation. (This is true for all phases of planning: preactive, interactive, or postactive. However, this study will focus only on the preactive phase.) This exploratory study will address these identified needs by describing and comparing the planning strategies of teachers in the regular program with teachers of the gifted/talented. Depending on what is learned, there may be implications for curriculum development and for teacher education as well.

The interview package consists of four parts. A brief description of each part is outlined below.

PART 1: General Information

You will be asked some general sorts of questions about your role as curriculum planner at the classroom level. These questions will serve to focus your thinking on the more specific questions to follow.

PART 2: Planning Simulation

In this section, you will be asked to describe the planning strategy, or strategies, in which you would engage in a hypothetical planning situation. This simulation will provide a basis for comparing similarities and differences in planning approaches used by teachers of the gifted and teachers in the regular program.

PART 3: Teacher Opinionnaire

This part of the interview package deals with factors which you perceive to influence you when you are making curricular decisions.

PART 4: Personal and Professional Data

Information given in this part of the interview package will be held in the strictest confidence. Respondents are guaranteed anonymity with regard to the information they provide, although no compromising questions will be asked.

Thankyou in advance for taking the time to participate in this research project. Your cooperation and input is very much appreciated. A summary of the results of this study will be communicated to you in due course.

Sincerely,

T. E. Gerling

APPENDIX B

Interview Guide

Part One: General Perceptions of Curriculum Planning

1. What is your reaction to the idea that classroom teachers are curriculum planners?

2. How does that fit into your perception of yourself as a curriculum planner?

3. In what types of planning do you engage?

4. Of the various types of planning that you have described, which do you find to be most helpful to you as a classroom teacher?

5. What tells you that things are going well in your classroom and how do you feel this is directly related to your curriculum planning?

6. What other benefits do you perceive to accrue to yourself as a result of the curriculum planning in which you engage?

7. What are your feelings about making curricular decisions about what the pupils in your classroom will learn?

Part Two: Teachers' Planning Models

8. Imagine yourself in the situation where, for whatever reason, you have decided to design, or create, an original unit of study on the topic of Ecology. By original I mean not an adaptation of a chapter from a prescribed text, for example. How would you begin, and how would you proceed to the completion of a final product? Describe the process in which you would engage as best you can recall from your own

past efforts, and concentrate, if you will, on the preactive phase of your planning.

9. Would you say that this planning endeavor you have just described to me is typical of the planning that you normally engage in?

Part Three: Factors Influencing Curriculum Planning by Teachers

10. To what extent do you feel free to make decisions about what the pupils in your class will learn?

11. Think of all the factors that influence you when you are developing curricular plans. The rating sheet before you suggests a fairly exhaustive listing of factors that teachers have cited in other studies conducted on the subject of teacher planning as having some bearing on the decisions they made while planning. The items on the sheet have been grouped into four categories--factors relating to the role of the teacher/planner, to the pupils, to the curriculum, and to the learning environment. You will note also that each category is followed by an item simply referred to as "other". This will allow you to include any other influences which are relevant to your planning situation but are not contained in the listing. Please feel free to add any pertinent factors, as they apply. Rate the items on a scale of 1 to 5, from "not at all" to "great", as they presently affect your planning decisions, and be prepared to tell how they affect the decisions that you do make in the course of your preactive planning.

Part Four: Personal and Professional Data

12. What is your age as of May 1, 1987?

13. What is your gender?

14. What are your total years of teaching experience? How many of those years have been spent at the fourth, fifth, and sixth grade levels?

15. How many years of post-secondary education do you possess?

16. Name all the completed university courses you have taken which have assisted you in the task of curricular decision making.

17. List all other experiences--workshops, inservice seminars, mini-courses--in which you have participated for specific assistance in curricular decision making.

APPENDIX C

Teacher Opinionnaire/Rating Scale

Use the following scale to rate each of the factors listed below in terms of its impact on your curricular decision making:

1	not at all
2	minimal
3	moderate
4	considerable
5	great

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1. Factors Related to the Teacher/Planner

___a) your past experience

___b) your personality

___c) your repertoire of teaching skills and strategies

___d) your values and beliefs

___e) your knowledge of the subject matter

___f) other factors related to your role as teacher/planner

2. Factors Related to the Students

___a) student ability

___b) student talent

___c) social-emotional readiness of pupils

___d) student behavior

___e) students' intellectual, social, or skill needs

___f) students' interests

___g) other factors related to your pupils

3. Factors Related to the Curriculum

___a) the subject matter itself

___b) the curriculum guide/established objectives

___c) availability and/or suitability of materials

___d) current issues

___e) integration with other subject areas

___f) other factors related to curriculum

4. Factors Related to the Learning Environment

___a) class size

___b) classroom organization

___c) time

___d) the school principal; other teachers; parents

___e) the accountability system

___f) other factors related to the learning environment